

GenCore version 5.1.6
Copyright (c) 1993 - 2005 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: October 3, 2005, 07:51:04 ; Search time 28 Seconds
(without alignments)
1412.325 Million cell updates/sec

Title: US-10-821-502-4
Perfect score: 2228
Sequence: 1 MDAALLLSLEANCSLALAE.....SIFSPTRISFHSIKQTAAV 411

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	2228	100.0	411	2	A55610 corticotropin-rele
2	2026.5	91.0	431	2	I49149 CRF receptor - mou
3	2002.5	89.9	431	2	I49279 sauvagine/corticot
4	1999	89.7	430	2	A56726 corticotiberin rec
5	1569	70.4	415	2	S39535 corticotropin-rele
6	1561	70.1	415	2	I58144 corticotropin-rele
7	1550.5	69.6	444	2	A48260 corticotiberin rec
8	1430	64.2	375	2	I38879 corticotropin rele
9	619.5	27.8	585	2	A39286 parathyroid hormon
10	610.5	27.4	515	2	I49154 calcitonin recepto
11	609	27.3	478	2	A37430 calcitonin recepto
12	606.5	27.2	515	2	I60800 calcitonin recepto
13	605.5	27.2	479	2	S33746 calcitonin recepto
14	605	27.2	593	2	A49191 parathyroid hormon
15	595	26.7	591	2	S44203 parathyroid hormon
16	587	26.3	591	2	I54195 parathyroid hormon
17	573.5	25.7	482	2	A39285 calcitonin recepto
18	573	25.7	589	2	I59297 parathyroid hormon
19	571.5	25.7	449	2	S16319 secretin receptor
20	567.5	25.5	440	2	UC2532 secretin receptor
21	558	25.0	474	2	I37217 calcitonin recepto
22	555.5	24.9	498	2	I47130 calcitonin recepto
23	540	24.2	490	2	S34486 calcitonin recepto
24	540	24.2	550	2	A57519 parathyroid hormon
25	538.5	24.2	495	2	UC2195 vasoactive intesti
26	533.5	24.0	460	2	UC2194 vasoactive intesti
27	534	24.0	464	2	I60194 calcitonin-like re
28	528	23.7	459	2	JH0594 vasoactive intesti
29	521	23.4	461	2	JC2477 calcitonin recepto

30	515	23.1	485	2	JC4363 glucagon receptor
31	506	22.7	485	2	JO1957 glucagon receptor
32	505.5	22.7	467	2	JN0616 pituitary adenylat
33	503.5	22.6	525	2	JN0902 pituitary adenylat
34	499.5	22.4	463	2	S71624 glucagon-like pept
35	494.5	22.2	463	2	I84494 glucagon-like pept
36	491	22.0	463	2	A46172 glucagon-like pept
37	489	21.9	513	2	S47631 pituitary adenylat
38	487.5	21.9	495	2	S36114 pituitary adenylat
39	487	21.9	466	2	S66676 glucase-dependent
40	486	21.8	477	2	UC2041 glucagon receptor
41	485.5	21.8	495	2	S39061 pituitary adenylat
42	485	21.8	466	2	G02234 gastrin inhibitory
43	482	21.6	438	2	G02822 vasoactive intesti
44	473.5	21.3	523	2	S39060 pituitary adenylat
45	469.5	21.1	437	2	JU0185 PACAP/VIP receptor

ALIGNMENTS

RESULT 1
A55610
corticotropin-releasing factor receptor subtype 2 - rat
C/Species: Rattus norvegicus (Norway rat)
C/Date: 02-Jul-1996 #sequence_revision 02-Jul-1996 #ext_change 09-Jul-2004
C/Accession: A55610
R/Lovendberg, T.W.; Liaw, C.W.; Grigoriadis, D.E.; Clevenger, W.; Chalmers, D.T.; De Sou
Proc. Natl. Acad. Sci. U.S.A. 92, 836-840, 1995
A/Title: Cloning and characterization of a functionally distinct corticotropin-releasin
A/Reference number: A55610; MUID:95148632; PMID:7846062
A/Accession: A55610
A/Status: preliminary; translated from GB/EMBL/DBJ
A/Molecule type: mRNA
A/Residues: 1-411 <LOV>
A/Cross-references: UNIPROT:P47866; EMBL:U16253; NID:G644771; PIDN:A652159.1; PID:G644
C/Genetics:
A/Gene: CRFR
C/Superfamily: glucagon receptor

Query Match 100.0%; Score 2228; DB 2; length 411;
Best Local Similarity 100.0%; Pred. No. 5.2e-181;
Matches 411; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY	1	MDAALLLSLEANCSLALAEELLDDGWPDPPEGGYSYCNITLDDIGTCWPSAGCALV 60
DB	1	MDAALLLSLEANCSLALAEELLDDGWPDPPEGGYSYCNITLDDIGTCWPSAGCALV 60
QY	61	ERPCEYFNGIKYNTTRNAVRECLNGTWNASRIYNSHCEPIDDKORXYDHYRIALIIN 120
DB	61	ERPCEYFNGIKYNTTRNAVRECLNGTWNASRIYNSHCEPIDDKORXYDHYRIALIIN 120
QY	121	YLGHCVSVALVAAPLLFLVRSIRCLRVNIHNNITTEILRNITWFLQLIDHEVEGN 180
DB	121	YLGHCVSVALVAAPLLFLVRSIRCLRVNIHNNITTEILRNITWFLQLIDHEVEGN 180
QY	181	EWRCRCVTITPNVFTVNTFPMFVVECCYLTATVMTYSIEHLRKMLFLFGICIPRPIIV 240
DB	181	EWRCRCVTITPNVFTVNTFPMFVVECCYLTATVMTYSIEHLRKMLFLFGICIPRPIIV 240
QY	241	ANAVGLTYENECWFGKPGDLVDYIYOGPIILVLLINPFLFNIVRIIMTGLRASTTS 300
DB	241	ANAVGLTYENECWFGKPGDLVDYIYOGPIILVLLINPFLFNIVRIIMTGLRASTTS 300
QY	301	ETIQYRKAVKATLVLLPLGITMYLFFVNPGBDDLQIYFIYNSFLQSGFQGVSVFYC 360
DB	301	ETIQYRKAVKATLVLLPLGITMYLFFVNPGBDDLQIYFIYNSFLQSGFQGVSVFYC 360
QY	361	FRNGEYRSALRKRMWQDHARVAVARAMSIPSPTRISFHSIKQTAAV 411
DB	361	FRNGEYRSALRKRMWQDHARVAVARAMSIPSPTRISFHSIKQTAAV 411

```
RESULT 2
149149
CRF receptor - mouse
C:Species: Mus musculus (house mouse)
C:Date: 02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change 09-Jul-2004
C:Accession: I49149
R:Perrin, M.; Donaldson, C.; Chen, R.; Blount, A.; Berggren, T.; Bilezikjian, L.; Sawche
Proc. Natl. Acad. Sci. U.S.A. 92, 2969-2973, 1995
A:Title: Identification of a second corticotropin-releasing factor receptor gene and cha
A:Reference number: I49149; MUID:95224061; PMID:7708757
A:Accession: I49149
A:Status: preliminary; translated from GB/EMBL/DBJ
A:Molecule type: mRNA
A:Residues: 1-431 <RES>
A:Cross-references: UNIPROT:060748; EMBL:U17858; NID:g727254; PIDD:AAA68026.1; PID:g7272
C:Superfamily: glucagon receptor

Query Match      91.0%; Score 2026.5; DB 2; Length 431;
Best Local Similarity 87.9%; Pred. No. 6.4e-164;
Matches 376; Conservative 12; Mismatches 15; Indels 25; Gaps 2;

QY 3 AALLSLLEANCSLALAEELLIDGGEPPDPE-----GPYSYCNNT 43
Db 10 AQLLL-----CLFSLPLVLQVAGQAPQDQPLMTLEQYCHRTTIGNFSGPYTCNTT 63
QY 44 LDQIGTCWQSPAGALVERPCPEYFNGIKYNTTRNAYRECLNGTWASRINYSCEPILD 103
Db 64 LDQIGTCWQSPAGALVERPCPEYFNGIKYNTTRNAYRECLNGTWASRINYSCEPILD 123
QY 104 DKORKYDHYRIALINVLGHCVSVVAALFLLVLRISIRCLRNVIHMLITFFILRN 163
Db 124 DKORKYDHYRIALINVLGHCVSVVAALFLLVLRISIRCLRNVIHMLITFFILRN 183
QY 164 ITWFLQLIDHEVHEGNEVWCRCVTITFNYPVNTNFMMFVEGCVLHTAIWVTYSTEHLR 223
Db 184 IAWFLQLIDHEVHEGNEVWCRCVTITFNYPVNTNFMMFVEGCVLHTAIWVTYSTEHLR 243
QY 224 KWLFLFGWCIPCPPIIVAMAVGKLYENEOCMFGKEGDLVDYIYQGFVMLVLINPVL 283
Db 244 KWLFLFGWCIPCPPIIVAMAVGKLYENEOCMFGKEGDLVDYIYQGFVMLVLINPVL 303
QY 284 FNIVILMTKLRASITSETIOYRKAVKATLVLLPLGITMYLFFVNPBGDDLSQIVFIYF 343
Db 304 FNIVILMTKLRASITSETIOYRKAVKATLVLLPLGITMYLFFVNPBGDDLSQIVFIYF 363
QY 344 NSFLOSFGQFVSVYCFEFGNEVSALRKRMHMODHALLRPVVARAMSIPSPTRISFH 403
Db 364 NSFLOSFGQFVSVYCFEFGNEVSALRKRMHMODHALLRPVVARAMSIPSPTRISFH 423
QY 404 SIKQTAAY 411
Db 424 SIKQTAAY 431

RESULT 3
149279
sauvagine/corticotropin-releasing factor receptor - mouse
C:Species: Mus musculus (house mouse)
C:Date: 02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change 09-Jul-2004
C:Accession: I49279
R:Kishimoto, T.; Pearce, R.V.
Proc. Natl. Acad. Sci. U.S.A. 92, 1108-1112, 1995
A:Title: A sauvagine/corticotropin-releasing factor receptor expressed in heart and skel
A:Reference number: I49279; MUID:95166778; PMID:7755719
A:Accession: I49279
A:Status: preliminary; translated from GB/EMBL/DBJ
A:Molecule type: mRNA
A:Residues: 1-431 <KIS>
A:Cross-references: UNIPROT:060748; EMBL:U21729; NID:g717137; PIDD:AAC52174.1; PID:g7171
C:Superfamily: glucagon receptor

Query Match      89.9%; Score 2002.5; DB 2; Length 431;
Best Local Similarity 87.1%; Pred. No. 6.8e-162;
```

```
Matches 373; Conservative 12; Mismatches 18; Indels 25; Gaps 2;

QY 3 AALLSLLEANCSLALAEELLIDGGEPPDPE-----GPYSYCNNT 43
Db 10 AQLLL-----CLFSLPLVLQVAGQAPQDQPLMTLEQYCHRTTIGNFSGPYTCNTT 63
QY 44 LDQIGTCWQSPAGALVERPCPEYFNGIKYNTTRNAYRECLNGTWASRINYSCEPILD 103
Db 64 LDQIGTCWQSPAGALVERPCPEYFNGIKYNTTRNAYRECLNGTWASRINYSCEPILD 123
QY 104 DKORKYDHYRIALINVLGHCVSVVAALFLLVLRISIRCLRNVIHMLITFFILRN 163
Db 124 DKORKYDHYRIALINVLGHCVSVVAALFLLVLRISIRCLRNVIHMLITFFILRN 183
QY 164 ITWFLQLIDHEVHEGNEVWCRCVTITFNYPVNTNFMMFVEGCVLHTAIWVTYSTEHLR 223
Db 184 IAWFLQLIDHEVHEGNEVWCRCVTITFNYPVNTNFMMFVEGCVLHTAIWVTYSTEHLR 243
QY 224 KWLFLFGWCIPCPPIIVAMAVGKLYENEOCMFGKEGDLVDYIYQGFVMLVLINPVL 283
Db 244 KWLFLFGWCIPCPPIIVAMAVGKLYENEOCMFGKEGDLVDYIYQGFVMLVLINPVL 303
QY 284 FNIVILMTKLRASITSETIOYRKAVKATLVLLPLGITMYLFFVNPBGDDLSQIVFIYF 343
Db 304 FNIVILMTKLRASITSETIOYRKAVKATLVLLPLGITMYLFFVNPBGDDLSQIVFIYF 363
QY 344 NSFLOSFGQFVSVYCFEFGNEVSALRKRMHMODHALLRPVVARAMSIPSPTRISFH 403
Db 364 NSFLOSFGQFVSVYCFEFGNEVSALRKRMHMODHALLRPVVARAMSIPSPTRISFH 423
QY 404 SIKQTAAY 411
Db 424 SIKQTAAY 431

RESULT 4
A56726
corticoliberin receptor precursor, cardiac - mouse
C:Species: Mus musculus (house mouse)
C:Date: 21-Jul-1995 #sequence_revision 28-Jul-1995 #text_change 09-Jul-2004
C:Accession: A56726
R:Stenzel, P.; Kesteron, R.; Young, W.; Cone, R.D.; Rittenberg, M.B.; Stenzel-Poore, M.
Mol. Endocrinol. 9, 637-645, 1995
A:Title: Identification of a novel murine receptor for corticotropin-releasing hormone e
A:Reference number: A56726; MUID:96015396; PMID:7565810
A:Accession: A56726
A:Status: preliminary
A:Molecule type: mRNA
A:Residues: 1-430 <STE>
A:Cross-references: UNIPROT:060748; GB:U19939; NID:G806763; PIDD:AAC52243.1; PID:G806764
C:Superfamily: glucagon receptor
C:Keywords: cardiac muscle; heart

Query Match      89.7%; Score 1999; DB 2; Length 430;
Best Local Similarity 87.1%; Pred. No. 1.4e-161;
Matches 373; Conservative 12; Mismatches 17; Indels 26; Gaps 3;

QY 3 AALLSLLEANCSLALAEELLIDGGEPPDPE-----GPYSYCNNT 43
Db 10 AQLLL-----CLFSLPLVLQVAGQAPQDQPLMTLEQYCHRTTIGNFSGPYTCNTT 63
QY 44 LDQIGTCWQSPAGALVERPCPEYFNGIKYNTTRNAYRECLNGTWASRINYSCEPILD 103
Db 64 LDQIGTCWQSPAGALVERPCPEYFNGIKYNTTRNAYRECLNGTWASRINYSCEPILD 123
QY 104 DKORKYDHYRIALINVLGHCVSVVAALFLLVLRISIRCLRNVIHMLITFFILRN 163
Db 124 DKORKYDHYRIALINVLGHCVSVVAALFLLVLRISIRCLRNVIHMLITFFILRN 182
QY 164 ITWFLQLIDHEVHEGNEVWCRCVTITFNYPVNTNFMMFVEGCVLHTAIWVTYSTEHLR 223
Db 183 IAWFLQLIDHEVHEGNEVWCRCVTITFNYPVNTNFMMFVEGCVLHTAIWVTYSTEHLR 242
```

QY 224 KMFLFICGICPPIIIVAAVGLYENECQMGKPEBGDIYDYGPIILVLLINFLVL 283
 Db 243 KMFLFICGICPPIIIVAAVGLYENECQMGKPEBGDIYDYGPIILVLLINFLVL 302
 QY 284 FNIIVRLMKLRASSTSETIYQKAKAVATLVLLPLIGITMFLFNNPGEDLSQIYFIYF 343
 Db 303 FNIIVRLMKLRASSTSETIYQKAKAVATLVLLPLIGITMFLFNNPGEDLSQIYFIYF 362
 QY 344 NSFLOSGFQFVSVFCFNGEVRSAIRKMRMODHMLRVVAPARMSIPTSPTRISF 403
 Db 363 NSFLOSGFQFVSVFCFNGEVRSAIRKMRMODHMLRVVAPARMSIPTSPTRISF 422
 QY 404 SIKQTAAY 411
 Db 423 SIKQTAAY 430

RESULT 5
 S39535
 corticotropin-releasing hormone receptor - mouse
 C:Species: Mus musculus (house mouse)
 C:Date: 07-Oct-1994 #sequence_revision 10-Nov-1995 #text_change 09-Jul-2004
 C:Accession: S39535
 R:Vita, N.; Laurent, P.; Lefort, S.; Chalon, P.; Lelias, J.M.; Kagnad, M.; le Fur, G.;
 FEBS Lett. 335, 1-5, 1993
 A:Title: Primary structure and functional expression of mouse pituitary and human brain
 A:Reference number: S39534; PMID:94063063; PMID:8243652
 A:Accession: S39535
 A:Status: preliminary
 A:Molecule type: mRNA
 A:Residues: 1-415 <YIT>
 A:Cross-references: UNIPROT:P35347; EMBL:X72305; NID:9436120; PIDN:CAA51053.1; PID:94361
 A:Note: the sequence from Fig. 1 is inconsistent with that from Fig. 3 in having an addi
 C:Superfamily: G protein-coupled receptor; transmembrane protein

Query Match 70.4%; Score 1569; DB 2; Length 415;
 Best Local Similarity 69.4%; Pred. No. 3.4e-125;
 Matches 290; Conservative 50; Mismatches 54; Indels 24; Gaps 5;

QY 4 ALLL-----SLLEANC-SLALAEELLDGMBEPDEPGPYSCNTLIDQIGTCPOS 54
 Db 12 ALLLLGLNPVSTSLDQOCESLSLASNV-----SGLCNASVDLIGTCWPRS 58
 QY 55 ARGALVERPCPEYNGIKYNTTNAAYRECLNGTMASTRINYSCEPIIDDKORKYDHYR 114
 Db 59 PAQQLVVRPCPAFFYGVYNTTNGYRECLANGSMAARVNSCEQELNE-EKSKVHYH 117
 QY 115 IALINVLGHCVSVLVAFLFLPLVLRISIRCLRNVIHMLITTFILRNITWFLDQ-ID 173
 Db 118 IAVIIVLGHCLSLVALLVAFVFLRLRSIRCLRNIIHMLISAFILRNATWVVOULTVS 177
 QY 174 HEVHEGNEVWCRCVTTFINFYVNTNFPMWVEGCYLHTAIVMTYSTEHRLKMLFLFGWC 233
 Db 178 PEHQSGNVAMCRVLTAAYNVFHTNPFWMGEGCYLHTAIVLYTSDRLAKMFEVCIGWG 237
 QY 234 IPCPIIVANAAGLYENECQMGKPEBGDIYDYGPIILVLLINFLFNNPGEDLSQI 293
 Db 238 VPEPIIVANAIGLYENECQMGKPEBGDIYDYGPIILVLLINFLFNNPGEDLSQI 297
 QY 294 LRASSTSETIYQKAKAVATLVLLPLIGITMFLFNNPGEDLSQIYFIYNSFLOSGF 353
 Db 298 LRASSTSETIYQKAKAVATLVLLPLIGITMFLFNNPGEDLSQIYFIYNSFLOSGF 357
 QY 354 FVSVPFCFNGEVRSAIRKMRMODHMLRVVAPARMSIPTSPTRISFHSIKQTAAY 411
 Db 358 FVSVPFCFNGEVRSAIRKMRMODHMLRVVAPARMSIPTSPTRISFHSIKQSTAV 415

RESULT 6
 S158144
 corticotropin-releasing factor receptor - rat
 C:Species: Rattus norvegicus (Norway rat)

C:Date: 26-Jul-1996 #sequence_revision 26-Jul-1996 #text_change 09-Jul-2004
 C:Accession: S158144
 R:Chang, C.P.; Pearce, R.V.; O'Connell, S.; Rosenfeld, M.G.
 Neuron 11, 1187-1195, 1993
 A:Title: Identification of a seven transmembrane helix receptor for corticotropin-relea
 A:Reference number: S158144; PMID:9409969; PMID:8274282
 A:Accession: S158144
 A:Status: preliminary; translated from GB/EMBL/DBJ
 A:Molecule type: mRNA
 A:Residues: 1-415 <RES>
 A:Cross-references: UNIPROT:P35353; GB:I25438; NID:9450298; PIDN:AAA16441.1; PID:945761
 C:Superfamily: glucagon receptor

Query Match 70.1%; Score 1561; DB 2; Length 415;
 Best Local Similarity 74.3%; Pred. No. 1.6e-124;
 Matches 277; Conservative 49; Mismatches 45; Indels 2; Gaps 2;

QY 40 CNTLIDQIGTCWPOSAPGALVERPCPEYNGIKYNTTNAAYRECLNGTMASTRINYSHCE 99
 Db 44 CNASVDLIGTCWPRSAGOLVVRPCPAFFYGVYNTTNGYRECLANGSMAARVNSCEQ 103
 QY 100 PILDDKORKYDHYRITALLIINYLGHCVSVVAAFLPLVLRISIRCLRNVIHMLITTF 159
 Db 104 EILNE-EKSKVHYHVAIINYLGHCLSLVALLVAFVFLRLRSIRCLRNIIHMLISAF 162
 QY 160 ILRNITWFLDQ-IDHEVHEGNEVWCRCVTTFINFYVNTNFPMWVEGCYLHTAIVMTYS 218
 Db 163 ILRNATWFLVQLTSPSEVHQSNAVAMCRVLTAAYNVFHTNPFWMGEGCYLHTAIVLTS 222
 QY 219 TEHLRMLFLFGWCICPPIIIVAAVGLYENECQMGKPEBGDIYDYGPIILVLLI 278
 Db 223 TDLRLKRMFEICGMGVPPIIVAMAIGKLYHDEKCMFGRRPCVYDYGPIILVLLI 282
 QY 279 NFELFNIVRIIMTKLRASSTSETIYQKAVKATLVLLPLIGITMFLFNNPGEDLSQI 338
 Db 283 NFELFNIVRIIMTKLRASSTSETIYQKAVKATLVLLPLIGITMFLFNNPGEDLSQI 342
 QY 339 VFIFYNSFLOSGFQFVSVFCFNGEVRSAIRKMRMODHMLRVVAPARMSIPTSP 398
 Db 343 VFIFYNSFLOSGFQFVSVFCFNGEVRSAIRKMRMODHMLRVVAPARMSIPTSP 402
 QY 399 RISFHSIKQTAAY 411
 Db 403 RVSFHSIKQSTAV 415

RESULT 7
 A48260
 corticoliberin receptor, long splice form - human
 N:Alternate names: corticoliberin binding protein; corticotropin releasing factor recep
 C:Species: Homo sapiens (man)
 C:Date: 31-May-1996 #sequence_revision 11-Apr-1997 #text_change 09-Jul-2004
 C:Accession: I60975; A48260; S39534
 R:Chen, R.; Lewis, K.A.; Perrin, M.H.; Vale, W.W.
 Proc. Natl. Acad. Sci. U.S.A. 90, 8967-8971, 1993
 A:Title: Expression cloning of a human corticotropin-releasing factor (CRF) receptor.
 A:Reference number: A48260; PMID:94022256; PMID:7692441
 A:Accession: I60975
 A:Status: translated from GB/EMBL/DBJ
 A:Molecule type: mRNA
 A:Residues: 1-444 <RES>
 A:Cross-references: UNIPROT:P34998; GB:I23333; NID:9408691; PIDN:AAA3719.1; PID:940869
 A:Experimental source: Cushing corticotrophic cell tumor
 A:Accession: A48260
 A:Status: preliminary; translated from GB/EMBL/DBJ
 A:Molecule type: mRNA
 A:Residues: 1-145,175-444 <RES>
 A:Cross-references: GB:I23332; NID:9408689; PIDN:AAA3718.1; PID:9408690
 R:Vita, N.; Laurent, P.; Lefort, S.; Chalon, P.; Lelias, J.M.; Kagnad, M.; le Fur, G.;
 FEBS Lett. 335, 1-5, 1993
 A:Title: Primary structure and functional expression of mouse pituitary and human brain
 A:Reference number: S39534; PMID:94063063; PMID:8243652
 A:Accession: S39534

A:Status: preliminary
A:Molecule type: mRNA
A:Residues: 1-145, 175-444 <VIT>
A:Cross-references: EMBL:X72304; NID:9436118; PIDN:CAA51052.1; PID:9436119
A:Note: the sequence from Fig. 1 is inconsistent with that from Fig. 3 in having an additional
C:Genetics:
A:Gene: GDB:CRHR1; CRHR; CRF-R; CRP1
A:Cross-references: GDB:235922; OMIM:122561
A:Map position: 17q12-17q22
C:Superfamily: glucagon receptor
;Keywords: alternative splicing; transmembrane protein

Db 453 YCFNGEYQAEIKKMSRW 471

RESULT 10

149154

calcitonin receptor 1b - mouse

C:Species: Mus musculus (house mouse)

C>Date: 02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change 09-Jul-2004

C:Accession: 149154

R.Yamin, M.; Gorn, A.H.; Flannery, M.R.; Jenkins, N.A.; Gilbert, D.J.; Copeland, N.G.; T

Endocrinology 135, 2635-2643, 1994

A>Title: Cloning and characterization of a mouse brain calcitonin receptor complementary

A:Reference number: 149154; PMID:95080136; PMID:7988453

A:Accession: 149154

A>Status: preliminary; translated from GB/EMBL/DBJ

A:Molecule type: mRNA

A:Residues: 1-515 <RES>

A:Cross-references: UNIPROT:Q60755; EMBL:U18542; NID:g604510; PID:AAA69521.1; PID:g6045

C:Superfamily: glucagon receptor

Query Match 27.4%; Score 610.5; DB 2; Length 515;

Best Local Similarity 33.5%; Pred. No. 6.2e-44; Indels 67; Gaps 15;

Matches 140; Conservative 69; Mismatches 142; Indels 67; Gaps 15;

Qy 31 PDPEGYSYCNLTLDIGTCWPOSAPGALVERPCPEYFNGIKYNTTRNAVRECLNGTW- 89

Db 63 PYEGEGLCNRRWDG-WMCWMDTPAGATAYGHCDFP--DDTAEKSKYCDENGEW 119

Qy 90 ----ASRI--NYSHCEPLDDK-QRKYDHYRIALINYLGCVSVALVAFLVLVR 142

Db 120 RHPDSNRTWSNYTLCAFTSEKLNQNAVYLVY--LALV---GHSIALVAASMLIFWIFK 174

Qy 143 SIRCLBNVHNMNITFILNITWFLQID-----HEVHSGNEVW----- 183

Db 175 NISCORVTLHKMFLTYILNSII-IIHLEVPNGDLVRDPMHIFHNHTMTQMEL 233

Qy 184 -----CRVTTFNFVVTNFMFMVEGCYLTAIVMTSTH 221

Db 234 SPPLPLCAHEGKMDPHASEVISCVAHLFQYVMSCNFMMLCEGIYHMLIYMAVFTBE 293

Qy 222 LR-KMLFLFIGMCIPCPIIVAAVGLKYENEOCFEGKBDLVDTYVOCPIILVLLNF 280

Db 294 QRLRWYLL-LGWGFPVPTPIIHAITRALYNDNCWLSAETHLL--YIHGPVAVLVVNF 350

Qy 281 VFLFNIVRIIMTKLRASTSETIQYKAVKATLVLLPLGITMFEVNGEDDLSQIYF 340

Db 351 FFLNIVRLVLTVMKROTHEAESYMLKAVATVAVLPLGITQVFPVPPRPSNKLCKI-Y 409

Qy 341 IFENSFLQSFQGFVVFVFCFNGEVSALARKMH-----RWQDHALLRVVAVAMSIP 394

Db 410 DYLMHSLHFQGFVATITCFCHNEVQVTLKRWTKQMSQRMGRRRRTNRVVSAP 467

RESULT 11

A37430

calcitonin receptor - rat

C:Species: Rattus norvegicus (Norway rat)

C>Date: 02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change 24-Nov-1999

C:Accession: A37430

R:Sexton, P.M.; Housam, S.; Hilton, J.M.; O'Keefe, L.M.; Center, R.J.; Gillespie, M.T

Mol. Endocrinol. 7, 815-821, 1993

A>Title: Identification of brain isoforms of the rat calcitonin receptor.

A:Reference number: A37430; PMID:93368608; PMID:8395656

A:Accession: A37430

A>Status: preliminary; translated from GB/EMBL/DBJ

A:Molecule type: mRNA

A:Residues: 1-478 <RES>

A:Cross-references: GB:L13041; NID:g294530; PIDN:AAA03030.1; PID:g294531

C:Superfamily: glucagon receptor

Query Match 27.3%; Score 609; DB 2; Length 478;

Best Local Similarity 35.8%; Pred. No. 7.7e-44;

Matches 138; Conservative 67; Mismatches 142; Indels 38; Gaps 14;

Qy 30 PDPEGYSYCNLTLDIGTCWPOSAPGALVERPCPEYFNGIKYNTTRNAVRECLNGTW 89

Db 64 PYEGEGP--YCNRTWNG-WMCWMDTPAGATAYGHCDFP--DFDTEKSKYCDENGEW 118

Qy 90 ----ASRI--NYSHCEPLDDKQKRYDHYRIALINYLGCVSVALVAFLVLVR 142

Db 119 FRHPDSNRTWSNYTLCAFTSEKLNQNAVYLVY--LALV---GHSIALVAASMLIFWIFK 174

Qy 143 SIRCLBNVHNMNITFILNITWFLQID-----HEVHSGNWCRCVTIINYPVNT 198

Db 175 NISCORVTLHKMFLTYILNSII-IIHLEVPNGDLVRDPMHIFHNHTMTQMEL 233

Qy 199 FFMFVEGCYLTAIVMTSTHTR-KMFLFIGMCIPCPIIVAAVGLKYENEOCFEG 257

Db 234 YFMMLCEGIYHMLIYMAVFTEDQRLRWYLL-LGWGFPVPTPIIHAITRAVYNDNCWLS 292

Qy 258 KEGBDLVDTYVOCPIILVLLNFVFLFNIVRIIMTKLRASTSETIQYKAVKATLVLR 317

Db 293 TETHLL--YIHGPVAVLVVNFVFLNIVRLVLTVMKROTHEAEAVMYLKAVATVAVP 350

Qy 318 LGITTMFEVNGEDDLSQIYFIFENSFLQSFQGFVVFVFCFNGEVSALARKMH--- 374

Db 351 LGITQVFPVPPRPSNKLCKI-YDYLMSLHFQGFVATITCFCHNEVQVTLKRWMAQF 409

Qy 375 ----HRMODHALLRVVAVAMSIP 394

Db 410 KIOMSHRW-----GRRPTRNVVSAP 430

RESULT 12

160800

calcitonin receptor clb precursor - rat

C:Species: Rattus norvegicus (Norway rat)

C>Date: 02-Aug-1996 #sequence_revision 02-Aug-1996 #text_change 09-Jul-2004

C:Accession: 160800; S33747

R:Sexton, P.M.; Housam, S.; Hilton, J.M.; O'Keefe, L.M.; Center, R.J.; Gillespie, M.

Mol. Endocrinol. 7, 815-821, 1993

A>Title: Identification of brain isoforms of the rat calcitonin receptor.

A:Reference number: A37430; PMID:93368608; PMID:8395656

A:Accession: 160800

A>Status: preliminary; translated from GB/EMBL/DBJ

A:Molecule type: mRNA

A:Residues: 1-515 <RES>

A:Cross-references: UNIPROT:P32214; GB:L13040; NID:g294532; PIDN:AAA03031.1; PID:g29453

R:Albrand, K.; Mull, E.; Brady, E.M.G.; Herich, J.; Moore, C.X.; Beaumont, K.

FEBS Lett. 325, 225-232, 1993

A>Title: Molecular cloning of two receptors from rat brain with high affinity for salmon

A:Reference number: S33746; PMID:93307500; PMID:8391477

A:Accession: S33747

A:Molecule type: mRNA

A:Residues: 1-147, 'L', 149-458, 'R', 459-477, 'L', 479-515 <ALB>

A:Cross-references: GB:L14618; NID:g347431; PIDN:AAA65965.1; PID:g347432

C:Superfamily: glucagon receptor

C:Keywords: G protein-coupled receptor; transmembrane protein

Query Match 27.2%; Score 606.5; DB 2; Length 515;

Best Local Similarity 34.2%; Pred. No. 1.4e-43; Indels 73; Gaps 15;

Matches 144; Conservative 61; Mismatches 143; Indels 73; Gaps 15;

Qy 30 PDPEGYSYCNLTLDIGTCWPOSAPGALVERPCPEYFNGIKYNTTRNAVRECLNGTW 89

Db 64 PYEGEGP--YCNRTWNG-WMCWMDTPAGATAYGHCDFP--DFDTEKSKYCDENGEW 118

Qy 90 ----ASRI--NYSHCEPLDDKQKRYDHYRIALINYLGCVSVALVAFLVLVR 142

Db 119 FRHPDSNRTWSNYTLCAFTSEKLNQNAVYLVY--LALV---GHSIALVAASMLIFWIFK 174

Qy 143 SIRCLBNVHNMNITFILNITWFLQID-----HEVHSGNWCRCVTIINYPVNT 198

Db 175 NISCORVTLHKMFLTYILNSII-IIHLEVPNGDLVRDPMHIFHNHTMTQMEL 234

QY 169 --LQIDHE---VHEGNEWCRCTTIFNFVVTNPFWMFVEGCVLHTAIVMTSTELH 222
Db 225 PPLPSAIEGKMDPDHSEVTSCKIHFHFQYWMACNYFEMLCBGILHTLIYMAVFTEQ 294
QY 223 R-KMFLFTIGMCIPECPPIIVAMAVGLKYENECWCGKENGDLVDYITGCPPIILVLI 281
Db 295 RLRWYLL-LGWGFPVPTPIIHAITAAVYNDNCWISTEHL--YIHGPAVAAALVNF 351
QY 282 FLEFNIRILMTGLRASTSETIQYRKAVATVLLPLIGITVMLFFVNGEDDLSQIVFI 341
Db 352 FLINIVRLVLTGKQTHHEAEMYLKAVATMVVPLIGIQVFVPMRPSNKVLGKI-YD 410
QY 342 YFNSTLQSFQFPFVFCFENGVSARLKKW-----HRQDHALRVVAPAMSI 393
Db 411 YLMSHLIFHQGFVATVTCFCHNEVQVTLKQMAQFKIQMSHRM-----GRRPTNRVVA 466
QY 394 P 394
Db 467 P 467

RESULT 13

S33746
calcitonin receptor c1a precursor - rat
C|Species: Rattus norvegicus (Norway rat)
C|Date: 02-Dec-1993 #sequence_revision 10-Nov-1995 #text_change 09-Jul-2004
C|Accession: S33746
R|Albrandt, K.; Mull, E.; Brady, E.M.G.; Herich, J.; Moore, C.X.; Beaumont, K.
FEBS Lett. 325, 225-232, 1993
A|Title: Molecular cloning of two receptors from rat brain with high affinity for salmon
A|Reference number: S33746; MUID:93307500; PMID:8391477
A|Accession: S33746
A|Molecule type: mRNA
A|Residues: 1-479 <ALB>
A|Cross-references: UNIPROT:332214; GB:L14617; NID:G347429; PIDN:AAA56564.1; PID:G347430
C|Superfamily: glucagon receptor
C|Keywords: transmembrane protein

Query Match 27.2%; Score 605.5; DB 2; Length 479;
Best Local Similarity 35.8%; Pred. No. 1.5e-43;
Matches 138; Conservative 67; Mismatches 143; Indels 37; Gaps 14;
QY 30 PDDPGPYSCNTLLDQIGTCWPGASGALVERPCPEYFNIGIKYTNNAVRECLNGTW 89
Db 64 PVEGEGP--YCNRTWDG--WMCWDDTPAGVMSYQHCEDYPP--DPDTEKVSXKCDENGEM 118
QY 90 ----ASRT--NYSHCERTLDDKQKRYDLHYRIALLINVLGHCVSVAAVLAFLFVLR 142
Db 119 FRHPSNRKWSNYTLQNAFTPDKLHNAVLYLYLAV---GHSMSIALIASMGIFLFEK 174
QY 143 SIRCLRNVLMNLTITFIILNITWELQID---HEVHEGNEWCRCTTIFNFVVTN 198
Db 175 NLSQGRVTLHKMFLTYILNSII--IIHIVEVPPNGDLVRPDISKILHFPHQMMACN 233
QY 199 FFMFVEGCVLHTAIVMTSTELH-R-KMFLFTIGMCIPECPPIIVAMAVGLKYENECWCG 257
Db 224 YFMMLCEGIYHTLIYMAVFTEQRLRWYLL-LGWGFPVPTPIIHAITAAVYNDNCWIS 292
QY 258 KEGGDLVDYITGCPPIILVLIINFLVFNIVRLIMTKLRASTSETIQYRKAVATVLLP 317
Db 293 TETHLL--YIHGPAVAAALVNFPLINIVRLVTKMRTHEAEYMLKAVATMVVLP 350
QY 318 ILGITVMLFFVNGEDDLSQIVFIYFNSTLQSFQFPFVFCFENGVSARLKKW--- 374
Db 351 ILIGIQVFVPMRPSNKVLGKI-YDYLMSHLIFHQGFVATVTCFCHNEVQVTLKQMAQF 409
QY 375 ----HRQDHALRVVAPAMSI 394
Db 410 KIQMSHRM-----RPTNRVVA 467

RESULT 14

A49191

parathyroid hormone/PTH-related peptide receptor - human
N|Alternate names: parathyroid hormone/parathyroid hormone related peptide receptor
C|Species: Homo sapiens (man)
C|Date: 19-Dec-1993 #sequence_revision 18-Nov-1994 #text_change 09-Jul-2004
C|Accession: J38139; A49191; J38113; G01562; S29610
R|Schipani, E.; Weinstein, L.S.; Bergwitz, C.; Jida-Klein, A.; Kong, X.F.; Stuhmann, M.
Kronenberg, H.M.; Abou-Samra, A.B.; Segre, G.V.; Uneyhner, H.
J. Clin. Endocrinol. Metab. 80, 1611-1621, 1995
A|Title: Pseudohypoparathyroidism type 1b is not caused by mutations in the coding exons
A|Reference number: J38139; MUID:95263723; PMID:7745008
A|Accession: J38139
A|Status: translated from GB/EMBL/DBJ
A|Molecule type: DNA
A|Residues: 1-593 <RES>
A|Cross-references: UNIPROT:Q03431; EMBL:U22409; NID:9897594; PIDN:AA60657.1; PID:98975
R|Schipani, E.; Karga, H.; Karalis, A.C.; Potts Jr., J.T.; Kronenberg, H.M.; Segre, G.V.
Endocrinology 132, 2157-2165, 1993
A|Title: Identical complementary deoxyribonucleic acids encode a human renal and bone pa
A|Reference number: A49191; MUID:93238641; PMID:8386612
A|Accession: A49191
A|Status: preliminary
A|Molecule type: mRNA
A|Residues: 1-593 <SCH>
A|Cross-references: GB:L04308; NID:G190721; PIDN:AAA36525.1; PID:G190722
A|Note: sequence extracted from NCBI backbone (NCBI:130233, NCBI:130234)
R|Schneider, H.; Feyen, J.H.; Seuwen, K.; Movva, N.R.
Eur. J. Pharmacol. 246, 149-155, 1993
A|Title: Cloning and functional expression of a human parathyroid hormone receptor.
A|Reference number: J38113; MUID:93387403; PMID:8397094
A|Accession: J38113
A|Status: preliminary; translated from GB/EMBL/DBJ
A|Molecule type: mRNA
A|Residues: 1-593 <RES>
A|Cross-references: EMBL:X68596; NID:G396812; PIDN:CAA48589.1; PID:G396813
R|Levine, M.
Submitted to the EMBL Data Library, November 1994
A|Reference number: G07787
A|Accession: G01562
A|Status: translated from GB/EMBL/DBJ
A|Molecule type: mRNA
A|Residues: 1-593 <LEV>
A|Cross-references: EMBL:U17418; NID:G596129; PIDN:AAA56774.1; PID:G596130
C|Genetics: A|Intons: 25/3; 60/1; 105/1; 142/1; 181/3; 213/2; 278/3; 330/1; 350/2; 372/3; 404/2; 45
C|Superfamily: glucagon receptor
C|Keywords: G protein-coupled receptor; transmembrane protein

Query Match 27.2%; Score 605; DB 2; Length 593;
Best Local Similarity 31.7%; Pred. No. 2.1e-43;
Matches 142; Conservative 67; Mismatches 153; Indels 86; Gaps 15;
QY 6 LLSLENCSTLALBEL-----LID--GW-----GEP-----PDEGPy 37
Db 40 LHMRAQCEKRLKVLDPASIMSDKWTASISGPRKDKASGKLYPSESEKEAPT 99
QY 38 SY-----CNTLLDQIGTCWPGASGALVERPCPEYFNIGIKYTNNAVRECLNGTW-- 89
Db 100 GSRVYGRCLPEWBI-LCPILGAGVAVAPCPYI--YDNNHKGHAHYRRCDRNGSWEL 156
QY 90 ----ASRINSHCEPIILDDKQKRYDLHYRIALLINVLGHCVSVAAVLAFLFVLSI 144
Db 157 VPGHNRWANYSECYKFLNETREVERPDRIGIMYT-VGYSVSLASTLVAVLILAYFRRL 215
QY 145 RCLRNVLMNLTITFIILNITWEL-----QIDHEVH-----E 178
Db 216 HCTRNVIHMLFLSLMLAVSIFVADAVLYSGATLDEARLLEELRALIAQAPPPATNA 275
QY 179 GNEWCRCTTIFNFVVTNPFWMFVEGCVLHTAIVMTSTELH-R-KMFLFTIGMCIPEPI 238
Db 276 AGYACRVAVTFELFLATNVIWILVEGLYHLSLFMAFPSEKXKYLWGTGVAWGGLPAVF 335
QY 239 IVAMAVGLKYENECWCGKENGDLVD---YITGCPPIILVLIINFLVFNIVRLIMTKLR 294

Db 336 VAWNVSVATLANTSCM-----DLSSGNKWIQVILIASIYANFILFINIYRVLATKL 369

Qy 295 R---ASTSETIQRKAVKATLVLPLDITWLFVNPEGDDLSOI--VFYFNPSLOS 349

Db 330 RETNAGRODTRQQRKLLKSLTIVLWPLFGVHYIVFPAATPYTESGLIMQVQMYEMLFNS 449

Qy 350 FQGFVSVYPCFNGEYVRSALKRHRW 377

Db 450 FQGFVVALIYPCFNGEYVQAEIKKSSRW 477

RESULT 15

parathyroid hormone-related peptide receptor - mouse
C:Species: Mus musculus (house mouse)
C:Date: 13-Jan-1995 #sequence_revision 13-Jan-1995 #text_change 09-Jul-2004
C:Accession: S44203
R:Kaperlen, M.; van Dijk, T.B.; Hoelmakers, T.; Cremers, F.; Abou-Samra, A.B.; Boonstra
submitted to the EMBL Data Library, April 1994
A:Description: Expression pattern of parathyroid hormone/parathyroid hormone related pep
A:Reference number: S44203
A:Accession: S44203
A:Status: preliminary
A:Molecule type: mRNA
A:Residues: 1-591 <KAR>
A:Cross-references: UNIPROT:P41593; EMBL:X78936; NID:g474828; PIDN:CAAS5536.1; PID:g4748
C:Superfamily: glucagon receptor

Query Match	26.7%	Score 595;	DB 2;	length 591;
Best Local Similarity	30.6%	Pred. No. 1.5e-42;		
Matches 137;	Conservative 73;	Mismatches 152;	Indels 86;	Gaps 14;

```

QY 6 LLSLEANCSSLAAEEL-----LLD-----GM-----GEPDPGPGYSY-----39
Db 40 LLHRAQACDCKLLKEVLHTAAINIMEDKCMTPASTSGKPKRKAAPGKFYESKENDVPT 99
QY 40 -----CNTLDOIQTWCPOSAPALVERPCPEYENGIKYTNBAYRECLENGTW-- 89
Db 100 GSRRRGRPCLPJEMDNI--VCMPLGAPBEVAVAPCPDYI--YDFNHKHGAAYRCDRNGSWEV 156
QY 90 -----ASRINYSCEPIIDDKOKRYDIAHRIALINYLGHCVSAVLVAFLFVLVRSI 144
Db 157 VPGHNRTMANNSECKLFMTNETREVERFDRLGMIYT-VGJSMSLASTIYAVLILAYFRL 215
QY 145 RCLRNVIHNNLITTFILRNITWFL-----OLDHEVHEGNEV-----182
Db 216 HCTRNYIHHMPLFSFNLRAASIFVKAVALYSGFTLDBAERLTBEELHIIAQVPRPPAAA 275
QY 183 ----WCRCTTTFNNFVTVNFFMFMFEGCYLHTALVMTYSTHLRKMFLFTICMCPPI 238
Db 276 VGYACRAVAVTFEFLYFLATNYYWILVEGJLHLSLIMAFSEKKYLMGFTIFQMGAPAV 335
QY 239 IVAMAVGLKYENECQWFKPEGDLDV-----YIYOGPIILVLINFLFNIRILMTKL 294
Db 336 VAWMVGVATLANTGCM-----DLSSGHKKMIIQVPIIASVLANLILFINIIRVLATKL 389
QY 295 R---ASTSETIOYRKAVALVLLPELIGIYMLFVNVPEDDLSOI--VFIENSFLQS 349
Db 390 *ETNAGRCDDTQQYRKLRLSTLVLVPLFGVHYVFMALPYTEVSGTLMQIQMHYEMFNS 449
QY 350 FQGFVSVVYCFPFNEVRSALRKRMWR 377
Db 450 FQGFVAIIYCFPCNBEVQAEIRKSMWR 477

```

Search completed: October 3, 2005, 07:58:23
Job time : 29 secs

This Page Blank (uspio)

GenCore version 5.1.6
Copyright (c) 1993 - 2005 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: October 3, 2005, 07:50:44 ; Search time 100 Seconds
(without alignments)
2104.645 Million cell updates/sec

Title: US-10-821-502-4

Perfect score: 2228
Sequence: 1 MDAAALLSLLEANCSLALAE.....SIFTSPTRISFHSIKQTAAV 411

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1612378 seqs, 512079187 residues

Total number of hits satisfying chosen parameters: 1612378

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :
1: uniprot_03:*
2: uniprot_trembl:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	2228	100.0	411	1	CRF2_RAT
2	2111	94.7	411	1	CRF2_HUMAN
3	2105.5	94.5	410	2	OBWML9
4	2026.5	91.0	431	1	CRF2_MOUSE
5	1967.5	88.3	437	2	OBWML8
6	1836.5	82.4	412	2	Q72222
7	1793	80.5	413	1	CRF2_XENLA
8	1787.5	80.2	411	2	Q68Y60
9	1787	80.2	405	2	Q98UC1
10	1780.5	79.9	414	2	OBWML1
11	1593	71.5	420	1	CRF1_CHICK
12	1574	70.6	415	2	Q761L8
13	1573	70.6	415	2	OBWML2
14	1569.5	70.4	415	2	OBWML0
15	1569	70.4	415	1	CRF1_MOUSE
16	1563	70.2	415	2	Q98UC4
17	1562	70.1	445	2	Q98UC2
18	1561	70.1	415	1	CRF1_RAT
19	1561	70.1	430	2	OBWML2
20	1560.5	70.0	415	1	CRF1_XENLA
21	1555.5	69.8	447	2	Q98UC1
22	1550.5	69.6	444	1	CRF1_HUMAN
23	1550	69.6	428	2	Q98UC0
24	1546	69.4	434	2	Q733S9
25	1536	68.9	415	1	CRF1_SHEEP
26	1521.5	68.3	416	2	Q68Y61
27	1402	62.9	329	2	Q70UV6
28	1095	49.1	277	2	OBWML9
29	836	37.5	154	2	Q733A2
30	787	35.3	188	2	Q733A1
31	724	32.5	441	1	DIRH_ACHDO

32	697	31.3	504	2	Q9V716	Q9V716 drosophila
33	684	30.7	388	2	Q9V6C7	Q9V6C7 drosophila
34	662.5	29.7	465	2	Q70773	Q70773 anopheles g
35	661	29.7	641	2	Q65AS2	Q65AS2 nilaparvata
36	658.5	29.6	631	2	Q65AS3	Q65AS3 nilaparvata
37	613.5	27.5	585	1	PTFR_DIDMA	P25107 didelphis m
38	611	27.4	478	2	Q924D5	Q924D5 mus musculu
39	611	27.4	495	2	Q924D6	Q924D6 mus musculu
40	610.5	27.4	515	1	CALR_MOUSE	Q924D6 mus musculu
41	610.5	27.4	512	2	Q924D7	Q924D7 mus musculu
42	609.5	27.4	585	1	PTFR_PIG	P50133 sus scrofa
43	605	27.2	593	1	PTFR_HUMAN	Q03431 homo sapien
44	604.5	27.1	589	2	Q7YR13	Q7YR13 cervus elap
45	603	27.1	516	1	CALR_RAT	P32214 rattus norv

ALIGNMENTS

```

RESULT 1
CRF2_RAT
ID CRF2_RAT STANDARD; PRT; 411 AA.
AC P47866;
DT 01-FEB-1996 (Rel. 33, Created)
DT 01-FEB-1996 (Rel. 33, Last sequence update)
DT 25-OCT-2004 (Rel. 45, Last annotation update)
DE Corticotropin releasing factor receptor 2 precursor (CRF-R 2) (CRF2)
DE (Corticotropin-releasing hormone receptor 2) (CRH-R 2).
GN Name=Crt2r; Synonym=Crt2r;
OS Rattus norvegicus (Rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OX NCBI_TaxID=10116;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=Sprague-Dawley; TISSUE=Hypothalamus, and Lung;
RX MEDLINE=95148632; PubMed=7846062;
RA Lovenberg T.W., Liaw C.W., Grigoriadis D.E., Clevenger W.,
RA Chalmers D.T., de Souza E.B., Oltersdorf T.;
RT "Cloning and characterization of a functionally distinct
RT corticotropin-releasing factor receptor subtype from rat brain."
RT Proc. Natl. Acad. Sci. U.S.A. 92:836-840(1995).
RN [2]
RP ERRATUM.
RA Lovenberg T.W., Liaw C.W., Grigoriadis D.E., Clevenger W.,
RA Chalmers D.T., de Souza E.B., Oltersdorf T.;
RL Proc. Natl. Acad. Sci. U.S.A. 92:5759-5759(1995).
CC -1- FUNCTION: This is a receptor for corticotropin releasing factor.
CC Shows high-affinity CRF binding. Also binds to urocortin I, II and
CC III. The activity of this receptor is mediated by G proteins which
CC activate adenyl cyclase.
CC -1- SUBCELLULAR LOCATION: Integral membrane protein.
CC -1- ALTERNATIVE PRODUCTS:
CC Event=Alternative splicing; Named isoforms=2;
CC Name=CRF2-alpha;
CC IsoId=P47866-1; Sequence=Displayed;
CC Note=Major isoform;
CC Name=CRF2-beta;
CC IsoId=P47866-2; Sequence=VSP_002001;
CC -1- TISSUE SPECIFICITY: Predominantly expressed in limbic regions of
CC the brain such as the lateral septum, the entorhinal cortex, the
CC hypothalamic ventromedial nucleus and several amygdaloid nuclei.
CC Also detectable in lung, kidney and heart.
CC -1- SIMILARITY: Belongs to the G-protein coupled receptor 2 family.
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC or send an email to license@isb-sib.ch).

```

[illegible]

```

DB      361 PFNGEVSRLRKRWHQHALLRVAVRARSIMSPISPRISFIHSIKOTAAV 411

RESULT 2
ID      CRF2_HUMAN          STANDARD;          PRT;          411 AA.
AC      Q13324; 043461; 099431;
DT      01-NOV-1997 (Rel. 35, Created)
DT      30-MAY-2000 (Rel. 39, Last sequence update)
DT      25-OCT-2004 (Rel. 45, Last annotation update)
DE      Corticotropin-releasing factor receptor 2 precursor (CRF-R 2) (CRF2)
DE      (Corticotropin-releasing hormone receptor 2) (CRH-R 2).
GN      Name=CRHR2; Synonyms=CRF2R, CRH2R;
OS      Homo sapiens (Human).
OC      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC      Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX      NCBI_Taxid=9606;
RN      [1]
RP      SEQUENCE FROM N.A. (ISOFORM CRF2-ALPHA).
RX      MEDLINE=96107120; PubMed=8536644; DOI=10.1210/en.137.1.72;
RA      Liaw C.W., Lovenberg T.W., Barry G., Oltersdorf T., Grigoriadis D.E.,
RA      de Souza E.B.,
RT      "Cloning and characterization of the human corticotropin-releasing
RT      factor-2 receptor complementary deoxyribonucleic acid.";
RL      Endocrinology 137:72-77(1996).
RN      [2]
RP      SEQUENCE FROM N.A. (ISOFORM CRF2-BETA).
RC      TISSUE=Amygdala;
RA      Kostich W.A., Chen A., Sperle K., Horlick R.A., Patterson J.,
RA      Hyde T.M., Largent B.L.;
RT      "Molecular cloning of the human CRH2B receptor isoform: divergence
RT      from the rodent isoform in sequence and expression pattern.";
RL      Submitted (JUN-1997) to the EMBL/GenBank/DBJ databases.
RN      [3]
RP      SEQUENCE FROM N.A. (ISOFORM CRF2-GAMMA).
RC      TISSUE=Amygdala;
RX      MEDLINE=98381934; PubMed=9717834; DOI=10.1210/me.12.8.1077;
RA      Kostich W.A., Chen A., Sperle K., Largent B.L.;
RT      "Molecular identification and analysis of a novel human corticotropin-
RT      releasing factor (CRF) receptor: the CRF2gamma receptor.";
RL      Mol. Endocrinol. 12:1077-1085(1998).
RN      [4]
RP      SEQUENCE FROM N.A. (ISOFORMS CRF2-ALPHA AND CRF2-GAMMA).
RA      Andrews S., Langston Y., Stoneking T., Maupin R.;
RL      Submitted (JUN-1998) to the EMBL/GenBank/DBJ databases.
RN      [5]
RP      SEQUENCE FROM N.A. (ISOFORM CRF2-ALPHA).
RA      Suwa M., Sato T., Okouchi I., Arita M., Futami K., Matsumoto S.,
RA      Teutsuni S., Aburatani H., Asai K., Akiyama Y.;
RT      "Genome-wide discovery and analysis of human seven transmembrane helix
RT      receptor genes.";
RL      Submitted (JUL-2001) to the EMBL/GenBank/DBJ databases.
RN      [6]
RP      SEQUENCE OF 1-88 FROM N.A. (ISOFORM CRF2-BETA).
RX      TISSUE=Skeletal muscle;
RX      MEDLINE=97342544; PubMed=9199241; DOI=10.1016/S0167-4781(97)00047-X;
RA      Valdenaire O., Giller T., Breu V., Gottwick J., Kilpatrick G.;
RT      "A new functional isoform of the human CRF2 receptor for
RT      corticotropin-releasing factor.";
RL      Biochim. Biophys. Acta 1352:129-132(1997).
RN      [7]
RP      FODUCTN: This is a receptor for corticotropin releasing factor.
CC      Shows high-affinity CRF binding. Also binds to urocortin I, II and
CC      III. The activity of this receptor is mediated by G proteins which
CC      activate adenylate cyclase.
CC      -1- SUBCELLULAR LOCATION: Integral membrane protein.
CC      -1- ALTERNATIVE PRODUCTS:
CC      Event=Alternative splicing; Named isoforms=3;
CC      Name=CRF2-alpha;
CC      IsoId=Q13324-1; Sequence=Displayed;
CC      Name=CRF2-beta;
CC      IsoId=Q13324-2; Sequence=VSP_001999;
CC      Name=CRF2-gamma;
CC      IsoId=Q13324-3; Sequence=VSP_002000;

```



```
QY 1 MDALLLSLEANCSLAELBLDGDGEPDPGEGPYSYCNITLDDIGTCWPGASGALV 60
Db 1 MDALLLSLEANCSLAELBLDGDGEPDPGEGPYSYCNITLDDIGTCWPGASGALV 60
QY 61 ERPCPEYNGIKYNTTRAAVRECLNGTWSHINSHEEPILDDOKRYDLHAYRLALIN 120
Db 61 ERPCPEYNGIKYNTTRAAVRECLNGTWSHINSHEEPILDDOKRYDLHAYRLALIN 119
QY 121 YLGHVSVALVAALFLFVLSIRCLRNVIHWNILITFELIANITWFFLLQOLIDHEVEHGN 180
Db 120 YLGHVSVALVAALFLFVLSIRCLRNVIHWNILITFELIANITWFFLLQOLIDHEVEHGN 179
QY 181 EVMCRCTVTITFNYFVVTNPFVMEVFGCYLHATAVMTISTHLKXKLFPIGMCIPCIIV 240
Db 180 EVMCRCTVTITFNYFVVTNPFVMEVFGCYLHATAVMTISTHLKXKLFPIGMCIPCIIV 239
QY 241 AMAVCKLYENBQCFKPEKPGVLVYITVOGPIIVLLINFLVILNITWFKLRASTTS 300
Db 240 AMAIGKLYENKQCFKPEKPGVLVYITVOGPIIVLLINFLVILNITWFKLRASTTS 299
QY 301 ETIOYRKAVKATLVLLPLIGITVLMFVNPGEDLSQIVFIYFNSFLQSFQGFVSFVFC 360
Db 300 ETIOYRKAVKATLVLLPLIGITVLMFVNPGEDLSQIVFIYFNSFLQSFQGFVSFVFC 359
QY 361 PFNGEVSRLARKRMHMODHVALRVVARAMSIPSPTRISPHSIIKQTAAY 411
Db 360 PFNGEVSRLARKRMHMODHSLRVVARAMSIPSPTRISPHSIIKQTAAY 410

RESULT 4
CRF2_MOUSE STANDARD; PRT; 431 AA.
AC 060748; 060783; 060808;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 25-OCT-2004 (Rel. 45, Last annotation update)
DE Corticotropin releasing factor receptor 2 precursor (CRF-R 2) (CRF2)
DE Corticotropin-releasing hormone receptor 2 (CRH-R 2) (CRF-RB) (CRH-
DE R2).
GN Name=Crf2; Synonyms=Crf2r;
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Heart;
RA Perrin M., Donaldson C., Chen R., Blount A., Berggren T.,
RA Bilezikjian L., Sawchenko P., Vale W.;
RT "Identification of a second corticotropin-releasing factor receptor
RT gene and characterization of a cDNA expressed in heart.";
RL Proc. Natl. Acad. Sci. U.S.A. 92:2969-2973 (1995).
RN [2]
RP SEQUENCE FROM N.A.
RC STRAIN=BALE/c; TISSUE=Heart;
RA MEDLINE=9516778; PubMed=7755719;
RA Kishimoto T., Pearce R.V. II, Lin C.R., Rosenfeld M.G.;
RT "A sauvagine/corticotropin-releasing factor receptor expressed in
RT heart and skeletal muscle.";
RL Proc. Natl. Acad. Sci. U.S.A. 92:1108-1112 (1995).
RN [3]
RP SEQUENCE FROM N.A.
RC STRAIN=BALE/c; TISSUE=Heart;
RA MEDLINE=96015396; PubMed=7565810; DOI=10.1210/me.9.5.637;
RA Stenzel P., Kesterson R., Yeung W., Cone R.D., Rittenberg M.B.,
RA Stenzel-Poore M.P.;
RT "Identification of a novel murine receptor for corticotropin-releasing
RT hormone expressed in the heart.";
RL Mol. Endocrinol. 9:637-645 (1995).
CC -I- FUNCTION: This is a receptor for corticotropin releasing factor.
CC Shows high-affinity CRF binding. Also binds to urocortin I, II and
CC III. The activity of this receptor is mediated by G proteins which
```

```
CC activate adenylyl cyclase.
CC -I- SUBCELLULAR LOCATION: Integral membrane protein.
CC -I- TISSUE SPECIFICITY: Highly expressed in the heart. Also expressed
CC in lungs, skeletal muscle, gastrointestinal tract, epididymis, and
CC brain.
CC -I- SIMILARITY: Belongs to the G-protein coupled receptor 2 family.
CC -----
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL, U17858; AAA68026.1; -.
DR EMBL, U21729; AAC52174.1; -.
DR EMBL, U19939; AAC52243.1; -.
DR PIR, A56726; A56726.
DR PIR, I49149; I49149.
DR PIR, I49279; I49279.
DR MGJ, MGJ:694312; Crhr2.
DR GO, GO:0015056; F:corticotropin-releasing factor receptor ac. .; IDA.
DR GO, GO:0016525; P:negative regulation of angiogenesis; IMP.
DR InterPro, IPR00832; GPCR_secretin.
DR InterPro, IPR001879; hormn_receptor.
DR Pfam, PF00002; 7tm_2; 1.
DR Pfam, PF02793; HRM; 1.
DR PRINTS, PR00249; GPCRSECRETIN.
DR SMART, SM00008; HormR, 1.1.
DR PROSITE, PS00649; G_PROTEIN_RECPE_F2_1; 1.
DR PROSITE, PS00650; G_PROTEIN_RECPE_F2_2; 1.
DR PROSITE, PS50227; G_PROTEIN_RECPE_F2_3; 1.
DR PROSITE, PS50261; G_PROTEIN_RECPE_F2_4; 1.
KW G-protein coupled receptor; Glycoprotein; Signal; Transmembrane.
FT SIGNAL 1 24
FT CHAIN 25 431
FT FT
FT DOMAIN 25 138
FT TRANSMEM 139 159
FT DOMAIN 160 168
FT TRANSMEM 169 188
FT DOMAIN 189 205
FT TRANSMEM 206 229
FT DOMAIN 230 243
FT TRANSMEM 244 265
FT DOMAIN 266 284
FT TRANSMEM 285 307
FT DOMAIN 308 330
FT TRANSMEM 331 350
FT DOMAIN 351 365
FT TRANSMEM 366 385
FT DOMAIN 386 431
FT CARBOHYD 52
FT CARBOHYD 61
FT CARBOHYD 94
FT CARBOHYD 106
FT CARBOHYD 114
FT CONFLICT 3
FT CONFLICT 126
FT CONFLICT 392
FT CONFLICT 396
FT CONFLICT 408
SQ SEQUENCE 431 AA; 49923 MW; A6D9DEB575DB8061 CRC64;

Query Match 91.0%; Score 2026.5; DB 1; Length 431;
Best Local Similarity 87.9%; Pred. No. 2.5e-144;
Matches 376; Conservative 12; Mismatches 15; Indels 25; Gaps 2;

QY 3 AALLLSLEANCSLAELBLDGDGEPDPGEGPYSYCNITLDDIGTCWPGASGALV 43
Db 10 AALLLSLEANCSLAELBLDGDGEPDPGEGPYSYCNITLDDIGTCWPGASGALV 63
```

QY	44	LDQJCTCWPQSPALVERPCEPEYENGIKYKNTTRNAYRECLENGTAASRYNTHSCEPILD	103
Db	64	LDQJCTCWPQSPALVERPCEPEYENGIKYKNTTRNAYRECLENGTAASRYNTHSCEPILD	123
QY	104	DKQRKYDLHRYALIIINYLGHCVSVAALVAAPLLFLVBSIRCLRVNIHNNLITTFILRN	163
Db	124	DKQRKYDLHRYALIIINYLGHCVSVAALVAAPLLFLVBSIRCLRVNIHNNLITTFILRN	183
QY	164	ITWFLLOLIDHEVHNEGNEVWCRCVTTINUYFVVVTNFFMMFVECCYLTALVMTYSTEHLR	223
Db	184	IAMFLLOLIDHEVHNEGNEVWCRCITTIINUYFVVVTNFFMMFVECCYLTALVMTYSTEHLR	243
QY	224	KMLFLFICGICPCPIIIVAAVAGKLYXENOCMFGEKPGDLDVYIIYOGPIIIVLLINVFL	283
Db	244	KMLFLFICGICPCPIIIVAAVAGKLYXENOCMFGEKAGDLVDYIIYOGPIIIVLLINVFL	303
QY	284	FNIVRIWTKLRASTTSETIIOYRKAVKATLVLLPLLGITYMLFFVNPGEDDLSQIVITYF	343
Db	304	FNIVRIWTKLRASTTSETIIOYRKAVKATLVLLPLLGITYMLFFVNPGEDDLSQIVITYF	363
QY	344	NSFLQSFQGFVSVFYCFPNGEVRSALRRGRHWMODHHAIRVAVAPAMSIPTISPTRISFH	403
Db	364	NSFLQSFQGFVSVFYCFPNGEVRSALRRGRHWMODHHAIRVAVAPAMSIPTISPTRISFH	423
QY	404	SIKOTAAV 411	
Db	424	SIKOTAAV 431	

RESULT 5	
Q8WML8	
ID Q8WML8	PRELIMINARY;
	PRT; 437 AA

DT 01-MAR-2002 (TEMBMrel. 20, Created)
DT 01-MAR-2002 (TEMBMrel. 20, last sequence update)
DT 01-MAR-2004 (TEMBMrel. 26, last annotation update)
DE Corticotropin releasing factor type 2B receptor.
GN Name=crl2b;
OS Tupaya glis belangeri (Common tree shrew).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Scandentia; Tupaiidae; Tupaya.
OX NCBI_TaxID=37347;
RN [1]
RP
RX MEDLINE=99288234; PubMed=10336722;
RA Patchaundhuri M.R., Hauger R.L., Wille S., Fuchs E., Dautzenberg F.M.;
RT Isolation and pharmacological characterization of two functional
RT splice variants of corticotropin-releasing factor type 2 receptor from
RT the tree shrew (Tupaya belangeri)."
RL J. Neuroendocrinol. 11:419-428(1999).

```

RP SEQUENCE FROM N.A.
RA Dautzenberg F.M.;
RL Submitted (DEC-2001) to the EMBL/GenBank/DBD databases.
DR EMBL, AJ442243; CAD19579.1;
DR GO: GO:0016020; C:membrane; IEA.
DR GO: GO:0004930; F:G-protein coupled receptor activity; IEA.
DR GO: GO:0004872; F:receptor activity; IEA.
DR Pfam: PF00002; Tcm_2_1.
DR Pfam: PF02793; HRM_1.
DR PRINTS: PRO1279; CRRECEPTOR.
DR PRINTS: PRO1281; CRRECEPTOR2.
DR PRINTS: PRO0249; GPCRSECRETIN.
DR SMART: SMO0008; Hormr. 1.
DR PROSITE: PS00649; G_PROTEIN_RECEP_F2_1; UNKNOWN_1.
DR PROSITE: PS00650; G_PROTEIN_RECEP_F2_3; 1.
DR PROSITE: PS00627; G_PROTEIN_RECEP_F2_3; 1.
DR PROSITE: PS50261; G_PROTEIN_RECEP_F2_4; 1.
KW Receptor.
SQ
SEQUENCE 437 AA; 50329 MW; E4721B7D80E1B07 CRC64;
Query Match 88.3%; Score 1967.5; DB 2; Length 437
Beet Local Similarity 94.2%; Pred. No. 7e-140;

```

	Matches	355; Conservative	14; Mismatches	7; Indels	1; Gaps
QY	35	GPYSYCNLTLDQIGTCWFOASPGALVERPCPEYENGIRKYNTRRNAVRECLENGWTASRIN	94		
Db	62	GPYSYCNLTLDQIGTCWBRSAAGALLBRPCPEYENGKVNATRNARYRECLENGWTASRIN	121		
QY	95	YSHCEPIIDDKORKYKDYHRYALALINNYGHCVSVVALVAAELFLVLSIRCLRNVIHWN	154		
Db	122	YSOCEPIIDDK-RKYDLYHRYALVNVNYIGHCVSMALVAAELFLFALNISIRCLRNVIHWN	180		
QY	155	LITFLILRNITWPLQLIDHEVHEGNEVWCQCVTTIFNYFVVTNFFNMVFECCYHTAV	214		
Db	181	LITFLILRNITWVPLQLIDHEVHEGNEVWCRCITTFINYPVVTNFFNMVFECCYHTAV	240		
QY	215	MTYSTENLRKKLFLFIQWICPCPIIIVAAVCKLYENQOCWFKGKRGSLVDIYOGPIIL	274		
Db	241	MTYSTERLRKKLFLFIQWCVCPPIIIAVALIKLYENQOCWFKGKRGSLVDIYOGPIIL	300		
QY	275	VLLINPVELFVIVILMTKLRASTTSETIOYRKAKVATLVLLPLIGITVYMLFEVNGEDD	334		
Db	301	VLLINPVELFVIVILMTKLRASTTSETIOYRKAKATLVLLPLIGITVYMLFEVNGEDD	360		
QY	335	LSQIVETIYFNSFLQSGQFVSVFCFNGEVSRLARKRMHMODHSLRVAVAMSP	394		
Db	361	LSQIVETIYFNSFLQSGQFVSVFCFNGEVSRLARKRMHMODHSLRVAVAMSP	420		
QY	395	TSPTRISFHSIKOTAAV	411		
Db	421	TSPTRISFHSIKOTAAV	437		

RESULT 6
Q7ZZZZ
ID Q7ZZZZ PRELIMINARY; PRT; 412 AA

Q0 SEQUENCE. 412 AA; 48095 MW; 641B269460EC4041 CRC64;

Query Match	82.4%	Score 1836.5;	DB 2;	Length 412;
Best Local Similarity	79.9%;	Pred. No. 4.7e-10;		
Matches 338;	Conservative 30;	Mismatches 32;	Indels 23;	Gaps 4

```
OY 1 MDAL---LISLEANCSLALAEELLDDMGEPDPDEGYS-----YCNTTLDQIG 48
Db 1 MDVTSQPILEEFDDANRSLDLQETVLES-----FSSIFGFGHLVCNATTDQIG 50
OY 49 TCWPOSAGALVERPCPEYFNGIKNTTRNAYRECLNGTWASRINYSHCEPILDDKORK 108
Db 51 TCWPAASAGKLVRCPEFNGIKNTTKNAYRECLNGTWASRINYSHCEPILDDK-RK 109
OY 109 YDLHRYALIIINYIGHCVSVAALVAFLFLVLRISIRCLRNVIHWNLTTFILRNITWFL 168
Db 110 YAHHYKALIIINYIGHCVSVAALVAFLFLVLRISIRCLRNVIHWNLTTFILRNITWFL 169
OY 169 LQLDHEHNEGNEWCRCVTTTFNFVNTNPFMMVEGCVLTALVTMTSTHRLKMLFL 228
Db 170 LQMDHNEHNEGNEWCRCVTTTFNFVNTNPFMMVEGCVLTALVTMTSTHRLKMLFL 229
OY 229 FIGMCIPEPIIYAAVAGKLYENECQWFGKEBPDVADYIYQSPILVLLINFELENIVR 288
Db 230 FIGMCIPEPIIYAAVAGKLYENECQWFGKEBPKTIDYIYQSPVLLVLLINFELENIVR 289
OY 289 ILMTKLRASTSETIYQKRAVATLVLLPLLGITYMLFFVNGEDDLSQIVFIYNSFLQ 348
Db 290 ILMTKLRASTSETIYQKRAVATLVLLPLLGITYMLFFVNGEDDLSQIVFIYNSFLQ 349
OY 349 SFQGFVSFVFCFNGEVRSAARKRWHRQDHARVYARAMSIPSPTRISFHSIKQT 408
Db 350 SFQGFVSFVFCFNGEVRSAARKRWHRQDHARVYARAMSIPSPTRISFHSIKQT 409
OY 409 AAV 411
Db 410 AAV 412

RESULT 7
CRF2_XENLA
ID CRF2_XENLA STANDARD; PRT; 413 AA.
AC 042603;
DT 15-JUL-1998 (Rel. 36, Created)
DT 15-JUL-1998 (Rel. 36, Last sequence update)
DT 25-OCT-2004 (Rel. 45, Last annotation update)
DE Corticotropin releasing factor receptor 2 precursor (CRF-R 2) (CRF2)
GN (Corticotropin-releasing hormone receptor 2) (CRH-R 2).
OS Name=CRF2;
OS Xenopus laevis (African clawed frog).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Amphibia; Batrachia; Anura; Mesobatrachia; Pipidae; Pipidae;
OC Xenopodinae; Xenopus.
OX NCBI_Taxid=8355;
RN (1)
RP SEQUENCE FROM N.A.
RC TISSUE=Brain, and Heart;
RX MEDLINE=97465573; PubMed=9326293;
RA Dautzenberg F.M., Dietrich K., Palchaudhuri M.R., Spiess J.;
RT "Identification of two corticotropin-releasing factor receptors from
RT Xenopus laevis with high ligand selectivity: unusual pharmacology of
RT the type 1 receptor.";
RL J. Neurochem. 69:1640-1649(1997).
CC -!- FUNCTION: This is a receptor for corticotropin releasing factor.
CC Shows high-affinity binding for urocensin I. The activity of this
CC receptor is mediated by G proteins which activate adenylyl cyclase
CC (by similarity).
CC -!- SUBCELLULAR LOCATION: Integral membrane protein.
CC -!- SIMILARITY: Belongs to the G-protein coupled receptor 2 family.
CC
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC or send an email to license@isb-sib.ch).
CC
CC EMBL; Y14037; CAAV4364.1; -.
```

```
DR InterPro; IPR000832; GPCR_secretin.
DR InterPro; IPR001879; hormn_receptor.
DR Pfam; PF00002; 7tm_2; 1.
DR Pfam; PF02793; HRM; 1.
DR PRINTS; PR00249; GPCRSECRETIN.
DR SMART; SM00008; Hormr; 1.
DR PROSITE; PS00649; G_PROTEIN_RECPE_F2_1; 1.
DR PROSITE; PS00650; G_PROTEIN_RECPE_F2_2; 1.
DR PROSITE; PS50227; G_PROTEIN_RECPE_F2_3; 1.
DR PROSITE; PS50261; G_PROTEIN_RECPE_F2_4; 1.
DR G-protein coupled receptor; Glycoprotein; Signal; Transmembrane.
FT SIGNAL 1
FT CHAIN ? 413
FT Corticotropin releasing factor receptor
FT DOMAIN ? 120
FT DOMAIN 121 141
FT DOMAIN 142 150
FT TRANSMEM 151 170
FT DOMAIN 171
FT TRANSMEM 188 211
FT TRANSMEM 212 225
FT TRANSMEM 226 247
FT TRANSMEM 248 266
FT TRANSMEM 267 289
FT DOMAIN 290 312
FT TRANSMEM 313 332
FT TRANSMEM 333 347
FT TRANSMEM 348 367
FT DOMAIN 368 413
FT CARBOHYD 16 16
FT CARBOHYD 77 77
FT CARBOHYD 89 89
FT CARBOHYD 97 97
FT SEQUENCE 413 AA; 48458 MM; DAD422F0A96C4626 CRC64;

Query Match 80.5%; Score 1793; DB 1; Length 413;
Best Local Similarity 80.0%; Pred. No. 8.9e-127;
Matches 333; Conservative 30; Mismatches 45; Indels 8; Gaps 4;

OY 1 MDAA---LISLEANCSL--ALAEELLDDMGEPDPDEGYSYCNNTLDQIGTCWPOSA 55
Db 1 MDSTFELLIDEPDANGSLDLAFQDSFLHSSSSPFGEG--YCSATTDQIGTCWPRSL 58
OY 56 PGALVERPCPEYFNGIKNTTRNAYRECLNGTWASRINYSHCEPILDDKORKXDLHYRI 115
Db 59 AGELEVERPCPSFNGIRYNTTRNAYRECEFGNGTWASRWNYSCVPILDNK-RKYALHYKI 117
OY 116 ALIIINYIGHCVSVAALVAFLFLVLRISIRCLRNVIHWNLTTFILRNITWFLQLDHE 175
Db 118 ALIIINYIGHCVSVAALVAFLFLVLRISIRCLRNVIHWNLTTFILRNITWFLQMDHN 177
OY 176 VHEGNEVWCRCVTTTFNFVNTNPFMMVEGCVLTALVTMTSTHRLKMLFLFIGWICP 235
Db 178 IHESNEVWCRCVTTTFNFVNTNPFMMVEGCVLTALVTMTSTHRLKMLFLFIGWICP 237
OY 236 CPIIYAAVAGKLYENECQWFGKEBPDVADYIYQSPILVLLINFELENIVRIMTYKLR 295
Db 238 SPIITWMAICLFYENECQWFGKEBPKTIDYIYQSPVLLVLLINFELENIVRIMTYKLR 297
OY 296 ASTTSETIYQKRAVATLVLLPLLGITYMLFFVNGEDDLSQIVFIYNSFLQSGFV 355
Db 298 ASTTSETIYQKRAVATLVLLPLLGITYMLFFVNGEDDLSQIVFIYNSFLQSGFV 357
OY 356 SVFYCFNGEVRSAARKRWHRQDHARVYARAMSIPSPTRISFHSIKQTAAY 411
Db 358 SVFYCFNGEVRSAARKRWHRQDHARVYARAMSIPSPTRISFHSIKQTAAY 413

RESULT 8
ID 068Y60 PRELIMINARY; PRT; 411 AA.
AC 068Y60;
DT 25-OCT-2004 (TREMBLrel. 28, Created)
```

DT 25-OCT-2004 (TrEMBLrel. 28, last sequence update)
DT 25-OCT-2004 (TrEMBLrel. 28, last annotation update)
DE Corticotropin releasing factor receptor type 2.
GN Name=CRFR-2;
OS Rana catesbeiana (Bull frog).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Amphibia; Batrachia; Anura; Neobatrachia; Ranioidea; Ranidae; Rana.
OX NCBI_TaxID=8400;
RN [1]
RP SEQUENCE FROM N.A.
RA Ito Y., Ogata D., Hasegawa I., Kikuyama S.;
RT "Molecular cloning of two corticotropin releasing factor receptors
from bullfrog."
RL Submitted (Aug-2004) to the EMBL/GenBank/DBJ databases.
DR EMBL; AB189111; BAD36784.1; -;
DR GO; GO:0004872; F_receptor activity; IEA.
DR InterPro; IPR003053; CRF2_receptor.
DR InterPro; IPR003051; CRF_receptor.
DR InterPro; IPR000832; GPCR_secretin.
DR InterPro; IPR001879; hormn_receptor.
DR Pfam; PF00002; 7tm_2; 1.
DR Pfam; PF02793; HRM; 1.
DR PRINTS; PR01279; CRFRECEPTOR.
DR PRINTS; PR01281; CRFRECEPTOR2.
DR PRINTS; PR00249; GPCRSECRETIN.
DR SMART; SM00008; Hormr; 1.
DR PROSITE; PS00649; G_PROTEIN_RECP_F2_1; 1.
DR PROSITE; PS00650; G_PROTEIN_RECP_F2_2; 1.
DR PROSITE; PS00657; G_PROTEIN_RECP_F2_3; 1.
DR PROSITE; PS50261; G_PROTEIN_RECP_F2_4; 1.
DR PROSITE; PS50261; G_PROTEIN_RECP_F2_4; 1.
KW Receptor.
SQ SEQUENCE 411 AA; 48152 MW; 96D64ED8A24C179B CRC64;

Query Match 80.2%; Score 1787.5; DB 2; Length 411;
Best Local Similarity 80.7%; Pred. No. 2,3e-126;
Matches 331; Conservative 31; Mismatches 39; Indels 9; Gaps 4;
QY 5 LLSLELANCSLALAE--LLLDGGEPPDPGEPYVCYCTTLDIGTCWPOSAPGALVE 61
DB 8 IFIDERDANCSLDADYDSFLTINHTFLPFD--GP--HCATIDQIGTCWPRISAGELVE 63
QY 62 RCPCEYFNGIKYNTTNAYRECLNGTWSRINYSHCEPIIDDKORRYDHYRIALIN 121
DB 64 RCPDPSFNGIKYNTTAVFRECPENGTSWMNYSQCVPLD--KKGHDLHYKIALIN 121
QY 122 LGHCVSVAVAAFLFLVLRSTRCLRNVIHNNLITTFILRNIMWFLQIDHNHKE 181
DB 122 LGHCVSVAVAAFLFLVLRSTRCLRNVIHNNLITTFILRNIMWFLQIDHNHKE 181
QY 182 VMCRCCTTFNYFVVTNPFMMFVEGCLHTAIVMTYSTHLRKMLFLFGMCIPCPPIVA 241
DB 182 IMCRCTTTIYNYFVVTNPFMMFVEGCLHTAIVMTYSTDLRKRVLLFLGMCIPCPPIIA 241
QY 242 WAVGKLYENEGQCFKEPGLVDYIYOGPIILVLLINFLVFNIRIIMTKLRASSTSE 301
DB 242 WAGKLYENEGQCFKEPGLVDYIYOGPIILVLLINFLVFNIRIIMTKLRASSTSE 301
QY 302 TIQYRAVAVATVLLPLLGITTYMLFVNPGEDDLSQIVPIYNSPIQSFGFVSVPYCF 361
DB 302 TIQYRAVAVATVLLPLLGITTYMLFVNPGEDDLSQIVPIYNSPIQSFGFVSVPYCF 361
QY 362 FNGEVSALARKRHRMODHNLAVPARAMSIPTSPTRISFHSIKOTAAV 411
DB 362 LNGEVSALARKRHRMODHNLAVPARAMSIPTSPTRISFHSIKOTAAV 411

RESULT 9
Q98UC1 PRELIMINARY; PRT; 405 AA.
AC Q98UC1; 01-JUN-2001 (TrEMBLrel. 17, Created)
DT 01-JUN-2001 (TrEMBLrel. 17, last sequence update)
DT 01-JUN-2003 (TrEMBLrel. 24, last annotation update)

DE Corticotropin releasing factor receptor 2.
OS Ameiurus nebulosus.
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Siluriformes;
OC Ictaluridae; Ameiurus.
OX NCBI_TaxID=27778;
RN [1]
RP SEQUENCE FROM N.A.
RA Arai M., Assil I.O., Abou-Samra A.B.;
RT "Characterization of three corticotropin-releasing factor receptors in
catfish: a novel third receptor is predominantly expressed in
pituitary and urophysis."
RL Endocrinology 142:446-454 (2001).
DR EMBL; AF229360; AA01069.1; -;
DR GO; GO:0016020; C_membrane; IEA.
DR GO; GO:0004930; F_G-protein coupled receptor activity; IEA.
DR GO; GO:0004872; F_receptor activity; IEA.
DR InterPro; IPR003053; CRF2_receptor.
DR InterPro; IPR003051; CRF_receptor.
DR InterPro; IPR000832; GPCR_secretin.
DR InterPro; IPR001879; hormn_receptor.
DR Pfam; PF00002; 7tm_2; 1.
DR Pfam; PF02793; HRM; 1.
DR PRINTS; PR01279; CRFRECEPTOR.
DR PRINTS; PR01281; CRFRECEPTOR2.
DR PRINTS; PR00249; GPCRSECRETIN.
DR SMART; SM00008; Hormr; 1.
DR PROSITE; PS00650; G_PROTEIN_RECP_F2_2; 1.
DR PROSITE; PS00657; G_PROTEIN_RECP_F2_3; 1.
DR PROSITE; PS50261; G_PROTEIN_RECP_F2_4; 1.
DR PROSITE; PS50261; G_PROTEIN_RECP_F2_4; 1.
KW Receptor.
SQ SEQUENCE 405 AA; 46823 MW; E05E96BCFEAD5CC5 CRC64;

Query Match 80.2%; Score 1787; DB 2; Length 405;
Best Local Similarity 79.7%; Pred. No. 2,5e-126;
Matches 329; Conservative 35; Mismatches 39; Indels 10; Gaps 4;
QY 1 MDAAL-LLSLELANCSLALAE--LLLDGGEPPDPGEPY--YCNITLDIGTCWPOSAPGA 58
DB 1 MEVSLLELSVENCSLA-----DAFDPAVGNASDALYCNATADIGTCWPRSGAGR 53
QY 59 LVERPCPEYFNGIKYNTTNAYRECLNGTWSRINYSHCEPIIDDKORRYDHYRIAL 118
DB 54 VVARPCPDPIYNGIKYNTSTSAVRECLNGTWSRINYSHCEPIIDDKORRYDHYRIAL 112
QY 119 INYLGHCVSVAVAAFLFLVLRSTRCLRNVIHNNLITTFILRNIMWFLQIDHNH 172
DB 113 INYLGHCVSVAVAAFLFLVLRSTRCLRNVIHNNLITTFILRNIMWFLQIDHNH 172
QY 179 GNEVWCRCCTTFNYFVVTNPFMMFVEGCLHTAIVMTYSTHLRKMLFLFGMCIPCP 238
DB 173 RNEPWCRLITTYNYFVVTNPFMMFVEGCLHTAIVMTYSTDLRKRVLLFLGMCIPCPV 232
QY 239 IYAAVAGKLYENEGQCFKEPGLVDYIYOGPIILVLLINFLVFNIRIIMTKLRAS 298
DB 233 IYAAVAGKLYENEGQCFKEPGLVDYIYOGPIILVLLINFLVFNIRIIMTKLRAS 292
QY 299 TSETTIQYRAVAVATVLLPLLGITTYMLFVNPGEDDLSQIVPIYNSPIQSFGFVS 358
DB 293 TSETTIQYRAVAVATVLLPLLGITTYMLFVNPGEDDLSQIVPIYNSPIQSFGFVS 352
QY 359 YCFEVSALARKRHRMODHNLAVPARAMSIPTSPTRISFHSIKOTAAV 411
DB 353 YCFEVSALARKRHRMODHNLAVPARAMSIPTSPTRISFHSIKOTAAV 405

RESULT 10
Q8AWA1 PRELIMINARY; PRT; 414 AA.
AC Q8AWA1; 01-MAR-2003 (TrEMBLrel. 23, Created)
DT 01-MAR-2003 (TrEMBLrel. 23, last sequence update)

DT 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
DE Corticotropin-releasing factor receptor type 2.
GN Name=crf2;
OS Oncomyrnchus keta (Chum salmon).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Actinopterygii; Neopterygii; Teleostei; Euteleostei;
OC Protacanthopterygii; Salmoniformes; Salmonidae; Oncomyrnchus.
OX NCBI_TaxID=8018;
RN [1]
RP SEQUENCE FROM N.A.
RC Tissue=Heart;
RA Pohl S., Darlison M.G., Lederis K., Richter D.;
RL Submitted (MAR-2000) to the EMBL/GenBank/DBJ databases.
DR EMBL; AJ277158; CAC81754.1; -.
DR GO; GO:0016020; G:membrane; IEA.
DR GO; GO:0004930; F:G-protein coupled receptor activity; IEA.
DR GO; GO:0004872; F:receptor activity; IEA.
DR InterPro; IPR003053; CRF2_receptor.
DR InterPro; IPR003051; CRF_receptor.
DR InterPro; IPR000832; GPCR_secretin.
DR InterPro; IPR001879; hormn_receptor.
DR Pfam; PF00002; 7tm_2; 1.
DR Pfam; PF02793; HRM; 1.
DR PRINTS; PR01279; CRRECEPTOR.
DR PRINTS; PR01281; CRRECEPTOR2.
DR PRINTS; PR00249; GPCRSECRETIN.
DR SMART; SMO0008; Hornr; 1.
DR PROSITE; PS00650; G_PROTEIN_RECEP_F2_2; 1.
DR PROSITE; PS50227; G_PROTEIN_RECEP_F2_3; 1.
DR PROSITE; PS50261; G_PROTEIN_RECEP_F2_4; 1.
KM Receptor.
SQ SEQUENCE 414 AA; 48329 MW; 11FB2E9E481CCC2 CRC64;

Query Match 79.9%; Score 1780.5; DB 2; Length 414;
Best Local Similarity 77.3%; Pred. No. 7.8e-126;
Matches 326; Conservative 36; Mismatches 41; Indels 19; Gaps 4;
QY 1 MDALLLSL-----RANCSLALAEELLDDGWMGEPDPDEGPVS-----YCNLTLDQIGT 49
DB 1 MDATYQIIFGFHFGDPNCS-----VMSFQDSFYENASFSLMPFDGLYCNATIDEIGT 53
QY 50 CWPQAPALVLRPERPEYNGIKYNTTNAVRECELENGTWMARINYSCEPLDKOKY 109
DB 54 CWPKNTGRMWRPPEYINGVKYNTTSAYRECDINGWALKSYSSCEPLLEK-RKY 112
QY 110 DLHYRIALINLYGHCVSVALVAFLFLVLRISIRCLRNVIHMLITTFILRNITWEL 169
DB 113 PMHYKIALINLYGHCISVGLVAVFIFLCIRSRICRLRNITHMLITTFILRNITWEL 172
QY 170 QLIIDHEVHGNEVWCRCVTTIFNYFVVTNFMFMFVEGCLHTAIVMTYSTELRKWELF 229
DB 173 QLIIDHNHESNPMCRLLITTIYNYFVTNFMFMFVEGCLHTAIVMTYSTDLKKWELF 232
QY 230 IGMCIIPCLPIYMAKLYENECQCFGEKPEKIDYIYQGVILVLLINPFLNIVRI 289
DB 233 IGMCIIPCLPIYMAKLYENECQCFGEKPEKIDYIYQGVILVLLINPFLNIVRI 292
QY 290 LMTKLRASTSETIYRKAVKATLVLLPLGLITVLLFVNPGEDDLSQVFIYFNSPLQS 349
DB 293 LMTKLRASTSETIYRKAVKATLVLLPLGLITVLLFVNPGEDDLSQVFIYFNSPLQS 352
QY 350 FQGFVSVYFCEFNCEVRSALAKRWHRWODHHLRVPVAVARAVISPTSPTRISFHSIKQTA 409
DB 353 FQGFVSVYFCEFNCEVRSALAKRWHRWODHHLRVPVAVARAVISPTSPTRISFHSIKQTA 412
QY 410 AV 411
DB 413 AV 414

RESULT 11
CRFL_CHICK STANDARD; PRT; 420 AA.

AC Q90812;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 25-OCT-2004 (Rel. 45, Last annotation update)
DE Corticotropin releasing factor receptor 1 precursor (CRF-R) (CRF1)
OS Gallus gallus (Chicken)
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
OC Gallus.
OX NCBI_TaxID=9031;
RN [1]
RP SEQUENCE FROM N.A.
RA MEDLINE=96107136; PubMed=8536612; DOI=10.1210/en.137.1.192;
RX Yu J., Xie L.Y., Abou-Samra A.-B.;
RT "Molecular cloning of a type A chicken corticotropin-releasing factor
receptor with high affinity for urotensin I."
RU Endocrinology 137:192-197(1996).
CC -!- FUNCTION: This is a receptor for corticotropin releasing factor.
CC Shows high-affinity binding for urotensin I. The activity of this
CC receptor is mediated by G proteins which activate adenylyl
CC cyclase.
CC -!- SUBCELLULAR LOCATION: Integral membrane protein.
CC -!- SIMILARITY: Belongs to the G-protein coupled receptor 2 family.
CC -----
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (see <http://www.isb-sib.ch/announce/>
CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL; L41563; AAA96656.1; -.
DR InterPro; IPR000832; GPCR_secretin.
DR InterPro; IPR001879; hormn_receptor.
DR Pfam; PF00002; 7tm_2; 1.
DR Pfam; PF02793; HRM; 1.
DR PRINTS; PR00249; GPCRSECRETIN.
DR SMART; SMO0008; Hornr; 1.
DR PROSITE; PS00649; G_PROTEIN_RECEP_F2_1; 1.
DR PROSITE; PS00650; G_PROTEIN_RECEP_F2_2; 1.
DR PROSITE; PS50227; G_PROTEIN_RECEP_F2_3; 1.
DR PROSITE; PS50261; G_PROTEIN_RECEP_F2_4; 1.
KM G-protein coupled receptor; Glycoprotein; Signal; Transmembrane.
FT SIGNAL 1 28
FT CHAIN 29 420
FT FT 29 420
FT DOMAIN 29 126
FT TRANSMEM 127 147
FT DOMAIN 148 156
FT TRANSMEM 157 176
FT DOMAIN 177 194
FT TRANSMEM 195 218
FT DOMAIN 219 232
FT TRANSMEM 233 254
FT DOMAIN 255 273
FT TRANSMEM 274 296
FT DOMAIN 297 319
FT TRANSMEM 320 339
FT DOMAIN 340 354
FT TRANSMEM 355 374
FT DOMAIN 375 420
FT DISULFID 49 92
FT DISULFID 49 92
FT DISULFID 73 107
FT CARBOHYD 43 43
FT CARBOHYD 50 50
FT CARBOHYD 83 83
FT CARBOHYD 95 95
FT CARBOHYD 103 103
SQ SEQUENCE 420 AA; 48600 MW; 8C5C992925F62316 CRC64;

Query Match	71.5%	Score 1593	DB 1	Length 420
Best Local Similarity	71.5%	Pred No. 1e-111		
Matches 294	Conservative 45	Mismatches 58	Indels 14	Gaps 4
QY	2	DAALLSLLEANCSTALAEELLDGMBEPDDEGYSYCNITLDIGTCWPSAGALVE	61	
Db	23	DSPVASISIOEQXC-----ESLL-----PTTNHTPGQCNASVLLIGTCWPSAGQLVA	70	
QY	62	RPCPEYFGIKYKNTTNRNAYRECLNGTMSASRINSHGCEIILDDKQKTDLHRIALINY	121	
Db	71	RPCPEYFGVARNNTNNNGRECLANGSMARVANSQCEIILSEKRS-KLHHIAVIINY	129	
QY	122	LGHCSVALVAAPLLFLVLRISICRLRNVIHNNLTFTFLIRNIITWFLLOL-IDHVEHGN	180	
Db	130	LGHCSIGTLVAFVLPMLRISIRCLRNIIHNNLTFTFLIRNATFVQGLTNNPREVHEN	189	
QY	181	EVMCRCTTTINYPFVYVTFNFMFVFGCYLHTAIWNTYSTEHUKMLFLFIGICIPDIIV	240	
Db	190	VVMGRLVTAAPNANFVATNFPMVFGGCVLHTAIVLTSTDKRKMMFICIGWCIPPIIV	249	
QY	241	AMAVGKLXYENEOCFGKEPGDVLVIYIQGPIILVLLINFEVLFNIVRLIMTKLBASTTS	300	
Db	250	AMALGKLYNDEKCMFGKRGAGYTDYIYIQGPILVLLINFTLFPNIVRLIMTKLBASTTS	309	
QY	301	ETIQYRKAVKATVLLPLIGITVLMFVNPGEDDISQIVIFYENSFLQSFOGFVYSVFXC	360	
Db	310	ETIQYRKAVKATVLLSLIGITVLMFVNPGEDDISRIIVIFYENSFLQSFOGFVYSVFXC	369	
QY	361	FFNGGVSRALKRMRMODHALRVPVAPAMSIPIPSRISHSIKQTAAY	411	
Db	370	FLNSEVSRVAVRMRMODKHSIRARVAPANSIPSPVSHHSIKQSAAY	420	

	RESULT	12
076Ll8	ID	Q76Ll8
	PRELIMINARY;	PRT; 415 AA.
AC Q76Ll8;		
DT 05-JUL-2004	(TEMBrel. 27, Created)	
DT 05-JUN-2004	(TEMBrel. 27, last sequence update)	
DE Corticotropin releasing factor receptor type 1.		
GN Name=CRF1;		
OS Macaca mulatta (Rhesus macaque).		
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi		
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;		
OC Cercopithecinae; Macaca.		
OX NCBI_TaxID=9544;		
RN [1]		
RP SEQUENCE FROM N.A.		
RA Oehida Y., Ikeda Y., Chaki S., Okuyama S.;		
RL Submitted (JAN-2002) to the EMBL/Genbank/DBJ databases.		
DR EMBL; AB078141; BAD0231.1; -.		
DR GO; GO:0016020; C:membrane; IEA.		
DR GO; GO:0004830; F:G-protein coupled receptor activity; IEA.		
DR GO; GO:0004872; F:receptor activity; IEA.		
DR InterPro; IPR003052; CRF1_receptor.		
DR InterPro; IPR003051; CRF_receptor.		
DR InterPro; IPR000832; GPCR_secretin.		
DR InterPro; IPR001879; hormn_receptor.		
DR Pfam; PF00002; 7tm_2; 1.		
DR Pfam; PF02793; HRM_1.		
DR PRINTS; PR01279; CRFRCEPTOR.		
DR PRINTS; PR01280; CRFRCEPTOR1.		
DR PRINTS; PR00249; GPCRSECRETIN.		
DR SMART; SM00008; Hormr. 1.		
DR PROSITE; PS00649; G_PROTEIN_RECP_F2_1; 1.		
DR PROSITE; PS00650; G_PROTEIN_RECP_F2_2; 1.		
DR PROSITE; PSS0227; G_PROTEIN_RECP_F2_3; 1.		
DR PROSITE; PSS0261; G_PROTEIN_RECP_F2_4; 1.		
KW Receptor.		
SQ SEQUENCE 415 AA; 47784 MW; 84C53DCEGDA97AD CRC64;		

[illegible]

RESULT	13			
08K3R2				
ID	08K3R2	PRELIMINARY;	PRT;	415 AA.
AC	08K3R2;			
DT	01-OCT-2002 (TREMBLrel. 22, Created)			
DT	01-OCT-2002 (TREMBLrel. 22, last sequence update)			
DT	01-JUN-2003 (TREMBLrel. 24, last annotation update)			
DE	Type-1 corticotropin-releasing hormone receptor alpha isoform			
OS	Name=CH-R1, Mesocricetus auratus (Golden hamster).			
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;			
OC	Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Cricetinae;			
OC	Mesocricetus.			
OX	NCBI_TaxID=10036;			
RN	[1]			
RP	SEQUENCE FROM N.A.			
RA	Pisarchik A.V., Slominski A.;			
RL	Submitted (May-2001) to the EMBL/GenBank/DBJ databases.			
DR	EMBL; AY034599; AAK59707.1; -			
DR	GO; GO:0016020; C:membrane; IEA.			
DR	GO; GO:0004930; F:G-protein coupled receptor activity; IEA.			
DR	GO; GO:0004872; F:receptor activity; IEA.			
DR	InterPro; IPR003052; CRP_receptor.			
DR	InterPro; IPR003051; CRF_receptor.			
DR	InterPro; IPR000832; GPCR secretion.			
DR	InterPro; IPR001879; homn_receptor.			
DR	Pfam; PF000002; 7tm_2.1.			
DR	Pfam; PF02793; HRM_1.			
DR	PRINTS; PR01279; CRECEPTOR.			
DR	PRINTS; PR01280; CRECEPTOR1.			
DR	PRINTS; PR00249; GPCRSECRETIN.			
DR	SMART; SM00008; Homr; 1.			
DR	PROSITE; PS00649; G_PROTEIN_REC_P2_1; 1.			
DR	PROSITE; PS00650; G_PROTEIN_REC_P2_2; 1.			
DR	PROSITE; PS50227; G_PROTEIN_REC_P2_3; 1.			
DR	PROSITE; PS50261; G_PROTEIN_REC_P2_4; 1.			
DR	Receptor.			
SQ	SEQUENCE 415 AA; 47702 MW; 500B4DD61E5F19E CRC64;			
Query Match	70.6%;	Score 1573;	DB 2;	Length 415;
Best Local Similarity	69.9%;	Pred. No. 3.2e-110;		

[illegible]

```

0Y      234  IPCIIIVAAVGLIYYENQOCFEGEPGLVDYIQGGIIIVLINFPLEFNIRILMTK 293
        ::::::::::::::::::::::::::::::::::::::::::::::::::::::
Db      238  VPPBIIIVAAIIGLYLDINEKCMFGKRGVYTDYIQGMIIVLINFPLEFNIRILMTK 299
        ::::::::::::::::::::::::::::::::::::::::::::::::::::::
0Y      294  LRASITSETIYRKAVKATLVLLPLIGITVM,LFVNPGEDDLSOIVFYFNSPLOSQGF 353
        ::::::::::::::::::::::::::::::::::::::::::::::::::::::
Db      298  LRASITSETIQHKAKVATLVLLPLIGITVM,LFVNPGEDEVSRVIFYFNSPLESQGF 357
        ::::::::::::::::::::::::::::::::::::::::::::::::::::::
0Y      354  FVAVFYCFNGEYRSALIRKMRMODHALLRPVVARASIPSPSPRISFHSIKOTAAN 411
        ::::::::::::::::::::::::::::::::::::::::::::::::::::::
Db      358  FVAVFYCFINSEYRSALIRKMRMODKSIIRARVARASIPSPSPRVSFHSIKOSTAV 415

```

Search completed: October 3, 2005, 07:57:50
Job time : 102 secs

This Page Blank (copy)

GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

Run on: October 3, 2005, 07:50:24 ; Search time 91 Seconds

(without alignments)
1746.797 Million cell updates/sec

Title: US-10-821-502-4

Perfect score: 2228
Sequence: 1 MDALLSLLEANCSLALAE.....SIFTSPTRIHSIKOTAAV 411

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 2105692 seqs, 386760381 residues

Total number of hits satisfying chosen parameters: 2105692

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-Processing: Minimum Match 0%
Maximum Match 100%

Listing first 45 summaries

Database : A_Geneseq_16Dec04:*

1: geneseqp1980s:*\n2: geneseqp1908s:*\n3: geneseqp2000s:*\n4: geneseqp2001s:*\n5: geneseqp2002s:*\n6: geneseqp2003as:*\n7: geneseqp2003bs:*\n8: geneseqp2004s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the change being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	2228	100.0	411	2	ABU62363 Rat corti
2	2228	100.0	411	2	AAO19428 Rat corti
3	2228	100.0	411	8	ADOS0799 Rat corti
4	2225	99.9	411	2	AAK90574 Rat CRF2-
5	2111	94.7	411	2	AAW16481 Human cor
6	2111	94.7	411	4	AAAB71867 Human CRF
7	2111	94.7	411	7	ADCB6183 Human GPC
8	2111	94.7	411	8	ADOC29267 Human GPC
9	2106	94.5	411	2	AAK90576 Human CRF
10	2106	94.5	411	5	AAO19424 Human cor
11	2106	94.5	411	6	ABP81806 Human cor
12	2106	94.5	411	8	ADOS0791 Human cor
13	2106	94.5	411	8	ADOC89168 Human uro
14	2055.5	92.3	411	2	ABU62364 Rat CRF2-
15	2042.5	91.7	411	2	AAK90575 Rat CRF2-
16	2042.5	91.7	411	5	AAO19429 Rat corti
17	2042.5	91.7	411	8	ADOS0801 Rat corti
18	2026.5	91.0	431	2	AAK97293 Mouse CRF
19	2026.5	91.0	431	2	ABU62362 Mouse cor
20	2026.5	91.0	431	5	AAE26683 Mouse cor
21	2026.5	91.0	431	5	AAO19431 Murine co
22	2026.5	91.0	431	5	ABU08079 Mouse cor
23	2026.5	91.0	431	6	ABG76050 Mouse cor
24	2026.5	91.0	431	8	ADJ65805 Mouse cor
25	2026.5	91.0	431	8	ADOC29268 Mouse GPC

26	2026.5	91.0	431	8	ADOS0805	Ados0805 mouse cor
27	1999	89.7	430	5	AAO19432	Aao19432 Murine co
28	1999	89.7	430	8	ADOS0807	Ados0807 mouse cor
29	1963	88.1	397	5	AAO19426	Aao19426 Human cor
30	1963	88.1	397	8	ADOS0795	Ados0795 Human cor
31	1962	88.1	438	5	AAO19425	Aao19425 Human cor
32	1962	88.1	438	8	ADOS0793	Ados0793 Human cor
33	1793	80.5	413	5	AAO19435	Aao19435 Xenopus c
34	1793	80.5	413	8	ADOS0813	Ados0813 Frog cort
35	1787	80.2	405	5	AAO19438	Aao19438 Fish cort
36	1787	80.2	405	8	ADOS0819	Ados0819 Brown bul
37	1593	71.5	420	5	AAO19440	Aao19440 Chicken c
38	1593	71.5	420	8	ADOS0823	Ados0823 Chicken c
39	1574	70.6	415	2	AAK69519	Aak69519 Human pit
40	1574	70.6	415	2	AAK97290	Aak97290 Human CRF
41	1574	70.6	415	2	AAW00159	Aaw00159 Human cor
42	1574	70.6	415	5	AAE26679	Aae26679 Human CRF
43	1574	70.6	415	5	AAO19420	Aao19420 Human cor
44	1574	70.6	415	5	AAO19421	Aao19421 Human cor
45	1574	70.6	415	5	ABG66957	Abg66957 Human cor

ALIGNMENTS

RESULT 1	ABU62363	ABU62363 standard; protein; 411 AA.
ID	ABU62363	
XX	ABU62363;	
XX	29-AUG-2003 (first entry)	
XX	Rat corticotropin release factor receptor, rCRF-R2alpha.	
DE	Corticotropic release factor; receptor; adrenocorticotrophic hormone; ACTH; blood flow; blood pressure; vascular bed; coronary blood flow; inflammation; vascular permeability; CRF-binding protein; parturition; Alzheimer's disease; chronic fatigue syndrome; appetite; alertness; rat; respiratory system; learning performance; depression; anxiety; memory; hypothalamic pituitary adrenal function; endocrine disorder; swelling; central nervous system disorder; CRF; rCRF-R2alpha.	
KW	Rattus sp.	
OS		
XX		
PN	US2003032587-A1.	
XX	13-FEB-2003.	
PD		
XX	26-MAR-2001, 2001US-00818009.	
PF		
XX	13-JUN-1995; 95US-0028444P.	
PR	11-AUG-1995; 95US-0002223P.	
XX	12-JUN-1996; 96WO-US010240.	
XX	10-DEC-1997; 97US-00981189.	
XX	(SALK) SALK INST BIOLOGICAL STUDIES.	
XX	Vale WW, Vaughan J, Donaldson CJ, Lewis KA, Sawchenko P; Rivier JEF, Perrin MH; WPI; 1997-077344/07.	
DR		
XX		
PT	Urocortin peptide(s) related to urocortin and corticotropin-releasing factor - for increasing ACTH and beta-endorphin levels, lowering blood pressure and improving mood, memory and learning performance.	
PT		
XX		
PS	Disclosure; Page 27-28; 34pp; English.	
XX	The invention relates to a human urocortin (ucn) peptide or an analogous sequence having only conservative substitutions to the amino acid residues in it, or an N-terminally shortened fragment of either which is biologically active to increase adrenocorticotrophic hormone (ACTH)	

production. Human urocortin or its N-terminally shortened antagonist peptide are useful for modifying blood flow and/or blood pressure and is further useful for modulating blood flow in a desired vascular bed. Human urocortin is also useful for increasing coronary blood flow and for decreasing swelling and/or inflammation and/or vascular permeability. A CRF-binding protein blocking compound is useful for increasing the in vivo level of CRF and/or Ucn. The amount of CRF-binding protein blocking compound is sufficient to promote parturition in a pregnant female. The amount of the compound administered is effective so as to result in an increase in free endogenous CRF and/or Ucn in the brain which causes improvement in short to medium term memory in a subject afflicted with Alzheimer's disease, relief from chronic fatigue syndrome, suppression of appetite, stimulation of the respiratory system, improvement in learning performance, improvement in memory, improvement in alertness, reduction of depression and/or lessening of anxiety. The compound is administered so that it reaches the brain. Human urocortin is useful for evaluating hypothalamic pituitary adrenal function in mammals with suspected endocrine or central nervous system pathology. Human urocortin antibodies are useful in diagnostic methods and systems for detecting the level of Ucn polypeptide, for immunospecificity or affinity chromatography purification of Ucn, and also in human therapeutic methods. The present sequence represents the amino acid sequence of the rat corticotropin release factor receptor, rCTF-R2alpha

Sequence 411 AA;
Query Match 100.0%; Score 2228; DB 2; Length 411;
Best Local Similarity 100.0%; Pred. No. 3e-212;
Matches 411; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MDALLSLLEANCSLALAEELLIDGWEPPDPGPGSYCTTTDQIGTCWQSPAGALV 60
DB 1 MDALLSLLEANCSLALAEELLIDGWEPPDPGPGSYCTTTDQIGTCWQSPAGALV 60
QY 61 ERPCPEYENGKIKYNTTRNAAYRECLENGTMASRINYSHCEPILDDKORKYDHYRIALITIN 120
DB 61 ERPCPEYENGKIKYNTTRNAAYRECLENGTMASRINYSHCEPILDDKORKYDHYRIALITIN 120
QY 121 YLGHCVSVVAAVAAFLFLVLSIRCLRNVIHWNLTITFIRNTITWFLQLIDHEVHGN 180
DB 121 YLGHCVSVVAAVAAFLFLVLSIRCLRNVIHWNLTITFIRNTITWFLQLIDHEVHGN 180
QY 181 EVMCRCTTTINNYFVVTNFMFMFVGCYLHAIWMTYSTELRKMLFLFIWCIPCPITV 240
DB 181 EVMCRCTTTINNYFVVTNFMFMFVGCYLHAIWMTYSTELRKMLFLFIWCIPCPITV 240
QY 241 AMAVGKLYYENBQCFGKEPGLVDYIYOGPIILVLLINFEVLINIVRLMTKLRASSTTS 300
DB 241 AMAVGKLYYENBQCFGKEPGLVDYIYOGPIILVLLINFEVLINIVRLMTKLRASSTTS 300
QY 301 ETIQYRKAVKATLVLLPLIGITVLMFLFVNPGEDDLSQLVIFVNSFLQSPGFVSFYFC 360
DB 301 ETIQYRKAVKATLVLLPLIGITVLMFLFVNPGEDDLSQLVIFVNSFLQSPGFVSFYFC 360
QY 361 FPNGEVRSALRKRWHRMODHHALRVPVARAMSIPSPTRISFHSIKQTAAY 411
DB 361 FPNGEVRSALRKRWHRMODHHALRVPVARAMSIPSPTRISFHSIKQTAAY 411

RESULT 2
AAO19428 standard; protein; 411 AA.
XX AAO19428;
XX
XX 10-DEC-2002 (first entry)
XX
XX Rat corticotropin releasing factor receptor CRF2Ralpha.
XX
XX Human; rat; mouse; sheep; cow; chicken; CRF1R; CRF2R;
XX skeletal muscle atrophy; corticotropin releasing factor-2 receptor;
XX muscular dystrophy; corticotropin releasing factor-1 receptor;
KW gene therapy.

XX Rattus norvegicus.
OS
XX MO200269908-A2.
PN
XX
XX 12-SEP-2002.
PD
XX
XX 06-MAR-2002; 2002WO-US007476.
PF
XX
XX 06-MAR-2001; 2001US-00799978.
PR
XX
XX (PROC) PROCTER & GAMBLE CO.
PA
XX
XX Isfort RJ, Sheldon RJ;
PI
XX
XX WPI; 2002-713413/77.
DR
XX
XX N-PSDB; AAL49979.
DQ

Identifying candidate compounds for regulating skeletal muscle mass or treating skeletal muscle atrophy by identifying test compounds that bind to, or activate, the corticotropin releasing factor-2 receptor.

Claim 7; Page 112-113; 167pp; English.

The present invention relates to a method of identifying candidate compounds for regulating skeletal muscle mass or function, and comprises contacting a test compound with a corticotropin releasing factor-2 receptor (CRF2R) or with a cell expressing a functional CRF2R, determining whether the test compound binds to, or activates, the CRF2R and identifying the test compounds that bind to, or activates, the CRF2R as candidate compounds for regulating skeletal muscle mass or function. The method is useful for preparing a medicament for treating skeletal muscle atrophy or for prophylactic treatment of muscular dystrophies. The present sequence is a corticotropin releasing factor receptor

Sequence 411 AA;

Query Match 100.0%; Score 2228; DB 5; Length 411;
Best Local Similarity 100.0%; Pred. No. 3e-212;
Matches 411; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MDALLSLLEANCSLALAEELLIDGWEPPDPGPGSYCTTTDQIGTCWQSPAGALV 60
DB 1 MDALLSLLEANCSLALAEELLIDGWEPPDPGPGSYCTTTDQIGTCWQSPAGALV 60
QY 61 ERPCPEYENGKIKYNTTRNAAYRECLENGTMASRINYSHCEPILDDKORKYDHYRIALITIN 120
DB 61 ERPCPEYENGKIKYNTTRNAAYRECLENGTMASRINYSHCEPILDDKORKYDHYRIALITIN 120
QY 121 YLGHCVSVVAAVAAFLFLVLSIRCLRNVIHWNLTITFIRNTITWFLQLIDHEVHGN 180
DB 121 YLGHCVSVVAAVAAFLFLVLSIRCLRNVIHWNLTITFIRNTITWFLQLIDHEVHGN 180
QY 181 EVMCRCTTTINNYFVVTNFMFMFVGCYLHAIWMTYSTELRKMLFLFIWCIPCPITV 240
DB 181 EVMCRCTTTINNYFVVTNFMFMFVGCYLHAIWMTYSTELRKMLFLFIWCIPCPITV 240
QY 241 AMAVGKLYYENBQCFGKEPGLVDYIYOGPIILVLLINFEVLINIVRLMTKLRASSTTS 300
DB 241 AMAVGKLYYENBQCFGKEPGLVDYIYOGPIILVLLINFEVLINIVRLMTKLRASSTTS 300
QY 301 ETIQYRKAVKATLVLLPLIGITVLMFLFVNPGEDDLSQLVIFVNSFLQSPGFVSFYFC 360
DB 301 ETIQYRKAVKATLVLLPLIGITVLMFLFVNPGEDDLSQLVIFVNSFLQSPGFVSFYFC 360
QY 361 FPNGEVRSALRKRWHRMODHHALRVPVARAMSIPSPTRISFHSIKQTAAY 411
DB 361 FPNGEVRSALRKRWHRMODHHALRVPVARAMSIPSPTRISFHSIKQTAAY 411

RESULT 3
ADO50799 standard; protein; 411 AA.
ID ADO50799

XX AC ADO50799;
 XX 12-AUG-2004 (first entry)
 XX DT
 XX DE Rat corticotropin releasing factor receptor 2, CRF2R.
 XX Rat; receptor; corticotropin releasing factor receptor; CRF1R; CRF2R;
 XX skeletal muscle; muscle atrophy; skeletal muscle dystrophy;
 XX skeletal muscle hypertrophy; surgery; bed rest; broken bone;
 XX infectious disease; AIDS cachexia.
 XX Rattus norvegicus.
 XX OS
 XX PN US2004101911-A1.
 XX PD 27-MAY-2004.
 XX 27-AUG-2003; 2003US-00649852.
 XX 06-MAR-2001; 2001US-00799976.
 XX (PROC) PROCTER & GAMBLE CO.
 XX Isefort RJ, Sheldon RJ;
 XX WPI: 2004-459890/43.
 XX DR N-PSDB; ADO50798.
 XX PT Identifying compounds for regulating skeletal muscle mass or function, by
 XX PT contacting test compound with vertebrate corticotropin releasing factor2
 XX PT receptors (CRF2R), selecting compounds that bind or activate CRF2R.
 XX PS Claim 3; SEQ ID NO 18; 100pp; English.
 XX The invention relates to identifying candidate compounds for regulating
 XX skeletal muscle mass or function, comprising contacting a test compound
 XX with vertebrate corticotropin releasing factor 2 receptors (CRF 2 R),
 XX determining if the compound binds to or activates CRF2R, selecting
 XX compounds that bind or activate CRF 2 R, and determining if compound
 XX increases muscle mass or function in muscle atrophy model. Also included
 XX are identifying candidate therapeutic compounds from a group of one or
 XX more candidate compounds which have been previously determined to bind to
 XX or activate a vertebrate CRF 2 R (comprising administering the candidate
 XX compound to a non-human animal and determining whether the candidate
 XX compound regulates skeletal muscle mass or function in the treated
 XX animal), increasing skeletal muscle mass or function in a subject in
 XX which such an increase is desirable (comprising identifying a subject in
 XX which an increase in muscle mass or function is desirable and
 XX administering to the subject a safe and effective amount of a CRF 2 R
 XX agonist), a purified antibody specific for a CRF2R (where the antibody is
 XX a chimeric or human antibody), and a pharmaceutical composition
 XX comprising a safe and effective amount of a CRF2R agonist and carrier.
 XX The methods are useful for identifying candidate compounds for regulating
 XX skeletal muscle mass or function, for increasing skeletal muscle mass or
 XX function (in a subject in which an increase is desirable), for
 XX identifying candidate compounds that are potentially useful in the
 XX treatment of skeletal muscle dystrophy and for identifying compounds that
 XX prolong or augment the agonist-induced activation of CRF2R or of a CRF2R
 XX signal transduction pathway. The compound is useful for treating skeletal
 XX muscle hypertrophy and for modulating skeletal muscle atrophy induced by
 XX e.g. surgery, bed rest, broken bones, infectious disease or AIDS
 XX cachexia. The present sequence represents a corticotropin releasing
 XX factor receptor.
 XX SQ Sequence 411 AA;
 QY Query Match 100.0%; Score 2228; DB 8; Length 411;
 Best Local Similarity 100.0%; Pred. No.3e-212;
 Matches 411; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 1 MDAALLSLLEANCSTLALAEELLIDGMBPPDEGPYSYCNITLDQIGTCWPOSAGALV 60
 |||||||||||||||||||||||||||||||||||||||||||||||||||||||||

DB 1 MDAALLSLLEANCSTLALAEELLIDGMBPPDEGPYSYCNITLDQIGTCWPOSAGALV 60
 QY 61 ERPCPEYFNGIKYKNTNRNAYRECLNGTWAASRINTSHCEPIIDDKORKYDLHRIALIN 120
 |||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 DB 61 ERPCPEYFNGIKYKNTNRNAYRECLNGTWAASRINTSHCEPIIDDKORKYDLHRIALIN 120
 QY 121 YLGHCVSVVALVAAPLLFLPLRSIRCLRVNIHWNLTITTEILRNITWFLQLIDHEVHEGN 180
 |||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 DB 121 YLGHCVSVVALVAAPLLFLPLRSIRCLRVNIHWNLTITTEILRNITWFLQLIDHEVHEGN 180
 QY 181 EVMCRCVTTITFNYPVTNTFFNMFVECCYLTHTAIWMTSYTEHLRKMLFLPIGWCIPCPITV 240
 |||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 DB 181 EVMCRCVTTITFNYPVTNTFFNMFVECCYLTHTAIWMTSYTEHLRKMLFLPIGWCIPCPITV 240
 QY 241 AMAVGKLYENBECWCKEPGDLVDYIYOGPIILVLINPFLFNIVRIIMTLRLASTTS 300
 |||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 DB 241 AMAVGKLYENBECWCKEPGDLVDYIYOGPIILVLINPFLFNIVRIIMTLRLASTTS 300
 QY 301 ETIQYRKAVKATLVLLPLIGITYMLFFVNPGEDDLGQIVFIYNSFLQSGFQFVSVPYC 360
 |||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 DB 301 ETIQYRKAVKATLVLLPLIGITYMLFFVNPGEDDLGQIVFIYNSFLQSGFQFVSVPYC 360
 QY 361 FPNGEVRSALRKRMHMODHMLRVVAPAMSIPTSPPTISFHSIKOTAAV 411
 |||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 DB 361 FPNGEVRSALRKRMHMODHMLRVVAPAMSIPTSPPTISFHSIKOTAAV 411
 RESULT 4
 AAR90574 standard; protein; 411 AA.
 ID AAR90574;
 AC AAR90574;
 XX 08-APR-1996 (first entry)
 XX DE Rat CRF2-alpha receptor.
 XX KW CRF2-alpha receptor; corticotropin-releasing factor-2 receptor;
 XX KW cerebrovascular disorder; memory disorder; Alzheimer disease.
 XX OS Rattus sp.
 XX FH Key
 FT 1. .117
 FT /label= Extracellular_N-terminal_domain
 FT 118. .138
 FT /label= Transmembrane_domain
 FT 139. .147
 FT /label= Intracellular_domain
 FT 148. .167
 FT /label= Transmembrane_domain
 FT 168. .184
 FT /label= Extracellular_domain
 FT 185. .208
 FT /label= Transmembrane_domain
 FT 209. .223
 FT /label= Intracellular_domain
 FT 224. .244
 FT /label= Transmembrane_domain
 FT 245. .261
 FT /label= Extracellular_domain
 FT 262. .286
 FT /label= Transmembrane_domain
 FT 287. .309
 FT /label= Intracellular_domain
 FT 310. .329
 FT /label= Transmembrane_domain
 FT 330. .342
 FT /label= Extracellular_domain
 FT 343. .363
 FT /label= Transmembrane_domain
 FT 364. .411
 FT /label= C-terminal_intracellular_domain

```

XX  FN W09534651-A2.
XX  PD 21-DEC-1995.
XX  PF 14-JUN-1995; 95WO-US007757.
XX  PR 14-JUN-1994; 94US-0029959.
XX  PR 31-JAN-1995; 95US-00381433.
XX  PR 07-JUN-1995; 95US-00485984.
XX  PA (NEUR-) NEUROCRINE BIOSCIENCES INC.
XX  PI Chalmers D, Lovenberg TW, Oleredorf T, Liaw CW, Grigoriadis DE;
XX  PI De Souza EB;
XX  DR MPI; 1996-049680/05.
XX  DR N-PSDB; AAT12243.
XX  PT Corticotropin-releasing factor-2 receptor, and DNA encoding it - used to
XX  PT isolate CRF-2 receptor antagonists for the treatment of cerebrovascular
XX  PT disorders, memory disorders and Alzheimer's disease.
XX  PS Claim 13; Page 70-73; 109pp; English.
XX  CC Rat corticotropin-releasing factor-2-alpha (CRF2-alpha) receptor
XX  CC (AAR90574) is a membrane-bound G-coupled protein receptor involved in
XX  CC signal transduction. It can be produced by expression of encoding cDNA
XX  CC (AAT12243) in prokaryotic or eucaryotic host cells. Recombinant CRF2
XX  CC receptor is used to screen CRF2 receptor agonists and antagonists of
XX  CC therapeutic appln., and to prepare antibodies which specifically bind to
XX  CC CRF2 receptors
XX  SQ Sequence 411 AA;

Query Match          99.9%; Score 2225; DB 2; Length 411;
Best Local Similarity 99.8%; Pred. No. 5,9e-212;
Matches 410; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 MDALLLSLEANCGLAAEELLDDMGEPDPPEGPGYSYCNITLDOIQTCPQAPGALV 60
DB 1 MDALLLSLEANCGLAAEELLDDMGEPDPPEGPGYSYCNITLDOIQTCPQAPGALV 60
QY 61 ERPCPEYENGIKYNTTRNAVRECLENGWASRINYSCEPIILDDQKRYDLHYRIALIN 120
DB 61 ERPCPEYENGIKYNTTRNAVRECLENGWASRINYSCEPIILDDQKRYDLHYRIALIN 120
QY 121 YLGHCVSVAAVLAFLPLVLSIRCLRNVIHWNLTITFILRNWVFLQLVDHEVHSGN 180
DB 121 YLGHCVSVAAVLAFLPLVLSIRCLRNVIHWNLTITFILRNWVFLQLVDHEVHSGN 180
QY 181 EVMCRCTTINNYFVVTNPFMMFVEGCVLHTAIWVTSTEHRLKMLFLFIGMCIPCPITV 240
DB 181 EVMCRCTTINNYFVVTNPFMMFVEGCVLHTAIWVTSTEHRLKMLFLFIGMCIPCPITV 240
QY 241 AMAVGKLYYENBQCFGKEPGLVDYIYOGPIILVLLNFVFLFNIVRLMTKLRASSTS 300
DB 241 AMAVGKLYYENBQCFGKEPGLVDYIYOGPIILVLLNFVFLFNIVRLMTKLRASSTS 300
QY 301 ETIQYRKAVKATLVLLPLGITTYMLFVNPGEDDLSQIVFIYFNSFLQSGFVSVFYC 360
DB 301 ETIQYRKAVKATLVLLPLGITTYMLFVNPGEDDLSQIVFIYFNSFLQSGFVSVFYC 360
QY 361 FPNGEVRSALRKRMHMODHALLRPVVARANSIPTSPRISFHSIKOTAAV 411
DB 361 FPNGEVRSALRKRMHMODHALLRPVVARANSIPTSPRISFHSIKOTAAV 411

RESULT 5
AAM16481
ID AAM16481 standard; protein; 411 AA.
XX AC AAM16481;

```

```

XX  DT 20-JUN-1997 (first entry)
XX  DE Human corticotropin releasing factor 2 receptor protein.
XX  KW Human; corticotropin; corticotropin; releasing factor 2; CRF2; receptor;
XX  KW screen; agonist; antagonist; activation; inhibition; prevention;
XX  KW treatment; dementia; obesity; acceleration; stress adaptation;
XX  KW melancholia; anxiety; stress headache; AIDS;
XX  KW acquired immunodeficiency syndrome; Alzheimer's disease;
XX  KW gastrointestinal disorder.
XX  OS Homo sapiens.
XX  PN JP09070289-A.
XX  PD 18-MAR-1997.
XX  PF 14-SEP-1995; 95JP-00237081.
XX  PR 27-JUN-1995; 95JP-00161213.
XX  PA (TAKE ) TAKEDA CHEM IND LTD.
XX  DR MPI; 1997-230023/21.
XX  DR N-PSDB; AAT66508.
XX  PT PCR primer for G protein conjugate type receptor protein DNA - and human
XX  PT corticotropin releasing factor 2 receptor protein, useful to screen for
XX  PT agonists and antagonists to treat dementia and anxiety.
XX  PS Claim 8; Page 39-40; 46pp; Japanese.
XX  CC The present sequence is the human corticotropin releasing factor 2
XX  CC (CRF2) receptor protein, which can be used to screen for an agonist or
XX  CC antagonist which activates the receptor, or competitively inhibits the
XX  CC binding of the receptor to CRF. The agonist can be used to prevent or
XX  CC treat dementia and obesity, or accelerate stress adaptation. The
XX  CC antagonist can be used to prevent or treat melancholia, anxiety, stress
XX  CC headaches, AIDS, Alzheimer's disease or gastrointestinal disorders
XX  SQ Sequence 411 AA;

Query Match          94.7%; Score 2111; DB 2; Length 411;
Best Local Similarity 93.9%; Pred. No. 1.3e-200;
Matches 386; Conservative 13; Mismatches 12; Indels 0; Gaps 0;

QY 1 MDALLLSLEANCGLAAEELLDDMGEPDPPEGPGYSYCNITLDOIQTCPQAPGALV 60
DB 1 MDALLLSLEANCGLAAEELLDDMGEPDPPEGPGYSYCNITLDOIQTCPQAPGALV 60
QY 61 ERPCPEYENGIKYNTTRNAVRECLENGWASRINYSCEPIILDDQKRYDLHYRIALIN 120
DB 61 ERPCPEYENGIKYNTTRNAVRECLENGWASRINYSCEPIILDDQKRYDLHYRIALIN 120
QY 121 YLGHCVSVAAVLAFLPLVLSIRCLRNVIHWNLTITFILRNWVFLQLVDHEVHSGN 180
DB 121 YLGHCVSVAAVLAFLPLVLSIRCLRNVIHWNLTITFILRNWVFLQLVDHEVHSGN 180
QY 181 EVMCRCTTINNYFVVTNPFMMFVEGCVLHTAIWVTSTEHRLKMLFLFIGMCIPCPITV 240
DB 181 EVMCRCTTINNYFVVTNPFMMFVEGCVLHTAIWVTSTEHRLKMLFLFIGMCIPCPITV 240
QY 241 AMAVGKLYYENBQCFGKEPGLVDYIYOGPIILVLLNFVFLFNIVRLMTKLRASSTS 300
DB 241 AMAVGKLYYENBQCFGKEPGLVDYIYOGPIILVLLNFVFLFNIVRLMTKLRASSTS 300
QY 301 ETIQYRKAVKATLVLLPLGITTYMLFVNPGEDDLSQIVFIYFNSFLQSGFVSVFYC 360
DB 301 ETIQYRKAVKATLVLLPLGITTYMLFVNPGEDDLSQIVFIYFNSFLQSGFVSVFYC 360
QY 361 FPNGEVRSALRKRMHMODHALLRPVVARANSIPTSPRISFHSIKOTAAV 411
DB 361 FPNGEVRSALRKRMHMODHALLRPVVARANSIPTSPRISFHSIKOTAAV 411

```

Db 361 FPNGEVRSARVRKRMHMODHSLRVPAMAMSIPTSPTRISPHSIKOTAAV 411

RESULT 6
AAB71867
ID AAB71867 standard; protein; 411 AA.

AC AAB71867;
XX
XX
DT 03-MAY-2001 (first entry)
XX
XX Human CRF2 seven transmembrane domain.
DE
XX Human; CRF2; corticotropin releasing factor receptor 2; h15571;
XX immunomodulatory; vascular; hepatic; antiasthma; antimicrobial;
XX antiinflammatory; immunosuppressive; gene therapy; vaccine;
XX G-protein coupled receptor; GPCR; liver fibrosis; respiratory disorder;
XX infection; chronic inflammatory disease; organ-specific autoimmunity;
XX graft rejection; cystic fibrosis.
XX
XX Homo sapiens.
XX
XX WO200109328-A1.
XX
XX 08-FEB-2001.
XX
XX 03-AUG-2000; 2000WO-US021278.
XX
XX 03-AUG-1999; 99US-0146916P.
XX 29-FEB-2000; 2000US-00515781.
XX
XX (MILL-) MILLENNIUM PHARM INC.
XX
XX Hodge MR, Lloyd C, Welch NS;
XX
XX WPI; 2001-138653/14.
XX
XX Nucleic acids encoding a G-prot. coupled receptor polypeptides, useful
XX for preventing, diagnosing and treating, e.g. liver fibrosis and asthma.
XX
XX
XX Disclosure; Fig 2; 145pp; English.

CC The present sequence is a human G-protein coupled receptor (GPCR) used
CC for comparison with the seven transmembrane domain of a novel GPCR
CC designated h15571. h15571 GPCR polynucleotides and polypeptides may be
CC used in the prevention, treatment and diagnosis of diseases associated
CC with inappropriate GPCR expression. Such diseases includes immune,
CC haematological, fibrotic, hepatic and respiratory disorders including
CC asthma, allergies (e.g. allergic rhinitis and psoriasis), pathogenic
CC infections, chronic inflammatory diseases, organ-specific autoimmunity,
CC graft rejection, graft versus host disease, cystic fibrosis and, in
CC particular, liver fibrosis. The GPCR polypeptides may be used as antigens
CC in the production of antibodies against GPCR and in assays to identify
CC modulators (agonists and antagonists) of GPCR expression and activity.
CC The anti-GPCR antibodies and GPCR antagonists may also be used to down
CC regulate GPCR expression and activity. The anti-GPCR antibodies may be
CC used as diagnostic agents for detecting the presence of GPCR polypeptides
CC in samples
XX
XX
XX Sequence 411 AA;

Query Match 94.7%; Score 2111; DB 4; Length 411;
Best Local Similarity 93.9%; Pred. No. 1.3e-200;
Matches 386; Conservative 13; Mismatches 12; Indels 0; Gaps 0;

QY 1 MDAALLSLLEANCSTLALAEELLDDGMBPPEGPGYSYCNNTLLDQIGTCWPOSAGALV 60
DB 1 MDAALLSLLEANCSTLALAEELLDDGMBPPEGPGYSYCNNTLLDQIGTCWPOSAGALV 60
QY 61 EBPPEYFNGIKNTNRAAYRECLNGTASRINYHCEPIILDDKORKYDLHRIILIN 120
DB 61 EBPPEYFNGIKNTNRAAYRECLNGTASRINYHCEPIILDDKORKYDLHRIILIN 120

QY 121 YLGHCVSVVALVAALFLVLVLRSLRCLRNVTIMNLTITFILNRTWFLQLTDHEVHECN 180
DB 121 YLGHCVSVVALVAALFLVLVLRSLRCLRNVTIMNLTITFILNRTWFLQLTDHEVHECN 180
QY 181 EVMGRCVTTTFYFVNTNPFMMFVEGCVLHTAIVNTYSTEHRLKMLFLFIGMCPPIIV 240
DB 181 EVMGRCVTTTFYFVNTNPFMMFVEGCVLHTAIVNTYSTEHRLKMLFLFIGMCPPIIV 240
QY 241 AMAVGKLYEENECWFKEPBGDLVDYIYOGPIILVLINFEVLFNIVRLMTKLRASST 300
DB 241 AMAVGKLYEENECWFKEPBGDLVDYIYOGPIILVLINFEVLFNIVRLMTKLRASST 300
QY 301 ETIQYRKAVKATVLLPLIGITVYMLFPVNPGEDDLSQLVFIYFNSFLOSFOGFPVSVC 360
DB 301 ETIQYRKAVKATVLLPLIGITVYMLFPVNPGEDDLSQLVFIYFNSFLOSFOGFPVSVC 360
QY 361 FPNGEVRSARVRKRMHMODHSLRVPAMAMSIPTSPTRISPHSIKOTAAV 411
DB 361 FPNGEVRSARVRKRMHMODHSLRVPAMAMSIPTSPTRISPHSIKOTAAV 411

RESULT 7
ADC86183
ID ADC86183 standard; protein; 411 AA.

AC ADC86183;
XX
XX
DT 01-JAN-2004 (first entry)
XX
XX Human GPCR protein SEQ ID NO:636.
DE
XX human; GPCR; guanosine triphosphate-binding protein coupled receptor;
XX gene therapy.
XX
XX Homo sapiens.
XX
XX EP1270724-A2.
XX
XX 02-JAN-2003.
XX
XX 18-JUN-2002; 2002EP-00013517.
XX
XX 18-JUN-2001; 2001JP-00246789.
XX
XX (NAD-) NAT INST ADVANCED IND SCI & TECHNOLOGY.
XX (ADSC-) CENT ADVANCED SCI & TECHNOLOGY INCUBATION.
XX Suwa M, Arai K, Akiyama Y, Aburatani H;
XX
XX WPI; 2003-315783/31.
XX N-PSDB; ADC86182.
XX
XX New polynucleotide, useful for preparing a composition for treating a
XX patient in need of increased or suppressed activity or expression of the
XX guanosine triphosphate-binding protein coupled receptor.
XX
XX Claim 2; SEQ ID NO 636; 28pp; English.

CC The invention relates to a novel polynucleotide encoding a guanosine
CC triphosphate-binding protein coupled receptor (GPCR). A polynucleotide of
CC the invention may have a use in gene therapy. The polynucleotide and
CC polypeptide are useful for preparing a composition for treating a patient
CC in need of increased or suppressed activity or expression of the
CC guanosine triphosphate-binding protein coupled receptor. The protein
CC sequences shown in ADC85549-ADC87617 represent GPCR's of the invention.
XX
XX
XX Sequence 411 AA;

Query Match 94.7%; Score 2111; DB 7; Length 411;
Best Local Similarity 93.9%; Pred. No. 1.3e-200;
Matches 386; Conservative 13; Mismatches 12; Indels 0; Gaps 0;

QY 1 MDAALLSLLEANCSTLALAEELLDDGMBPPEGPGYSYCNNTLLDQIGTCWPOSAGALV 60

Db 1 MDALLHSLBANCSLALAEELLDGMPPLDPBPSPYSCNTTLDQIGTCWPRSAAGLV 60
QY 61 ERPCPEYNGIKYNTTRNAVRECLENGWASRINYSHCEPILDDKORKYDLHYRIALJIN 120
Db 61 ERPCPEYNGVAVNTTRNAVRECLENGWASKINYSQCEPILDDKORKYDLHYRIALVYN 120
QY 121 YLGHCVSVAALVAALFLPLVLRISIRCLRNVIHNMNLTITFILRNVTMFLQILDHEVHSGN 180
Db 121 YLGHCVSVAALVAALFLPLVLRISIRCLRNVIHNMNLTITFILRNVTMFLQILDHEVHSGN 180
QY 181 EVMGRCVTTINNYFVNTNFMFVFGCYLHAIWMTYSTEHRLKMLFPIGMCIPPIIV 240
Db 181 EVMGRCVTTINNYFVNTNFMFVFGCYLHAIWMTYSTEHRLKMLFPIGMCIPPIIV 240
QY 241 AMAVGLKYENEDQCFGKEPGLVDVYIYOGPIILVLLINVFVLFNIVAILMTKLRASSTTS 300
Db 241 AMAVGLKYENEDQCFGKEPGLVDVYIYOGPIILVLLINVFVLFNIVAILMTKLRASSTTS 300
QY 301 ETIQYRKAVKATLVLLPLGITYMLFVNPGEDDLSQIVFIYNSFLOSFGGFFVSFVYC 360
Db 301 ETIQYRKAVKATLVLLPLGITYMLFVNPGEDDLSQIMFIYNSFLOSFGGFFVSFVYC 360
QY 361 FFNGEVSALRKWRHMODHSLRVPMARAMSIPSPRISFHSIKOTAAV 411
Db 361 FFNGEVSALRKWRHMODHSLRVPMARAMSIPSPRISFHSIKOTAAV 411

RESULT 8

ADO29267
ID ADO29267 standard; protein; 411 AA.

AC ADO29267;

DT 29-JUL-2004 (first entry)

DE Human GPCR CRRH2, SEQ ID NO:368.

XX G protein-coupled receptor; GPCR; drug screening; diagnosis;
XX transgenic mouse; neurological disorder; adrenal gland disorder;
XX colon disorder; intestinal disorder; cardiovascular disorder;
XX muscular disorder; blood disorder; immune disorder; bone disorder;
XX joint disorder; metabolic disorder; nutritive disorder; cancer;
XX kidney disorder; liver disorder; lung disorder; breast disorder;
XX ovary disorder; uterus disorder; prostate disorder; testis disorder;
XX skin disorder; stomach disorder; pancreas disorder; spleen disorder;
XX thymus disorder; thyroid disorder; antiparkinsonian; antianemic;
XX cytosolic; antiinflammatory; vasotropic; antidiabetic;
XX CNS; central nervous system; respiratory; antidiabetic; antidiabetic;
XX vitruclide; hepatocytic; antibacterial; antianemic; antidiabetic;
XX dermatological; antitumor; antitumor; antitumor; antitumor;
XX immunosuppressive; nephrotropic; gene therapy; GPCR modulator; human;
XX receptor.

XX Homo sapiens.

XX OS MO2004040000-A2.

XX 13-MAY-2004.

XX 09-SEP-2003; 2003WO-US028226.

XX 09-SEP-2002; 2002US-0409303P.

XX 09-APR-2003; 2003US-0461329P.

XX (PRIM-) PRIMAL INC.

XX Galtanaris GA, Bergmann JE, Gragerov A, Holmann J, Li F,

XX Madisen L, McIlwain KL, Pavlova MN, Vassiliadis D, Zeng H,

XX WPI: 2004-390329/36.

XX N-PSDB; ADO29852.

PT Novel mammalian G protein coupled receptors, useful for identifying
PT compounds that modulates diagnosing and treating disease condition
PT associated with GPCR dysfunction e.g. autoimmune diseases, angina
PT pectoris, Parkinson's disease.

PS Claim 151; SEQ ID NO 368; 542pp; English.

XX The invention relates to human and mouse G protein-coupled receptors
CC (GPCRs) and nucleic acids encoding them. The invention also relates to
CC sequences at least 90% identical to the GPCR proteins and nucleic acids
CC of the invention; methods of treating, preventing or diagnosing diseases
CC associated with GPCRs or the invention; methods of screening for
CC compounds useful in the treatment of GPCR-related diseases; a transgenic
CC mouse comprising a GPCR gene of the invention; a mouse comprising a
CC mutation in a GPCR transgene or in an endogenous GPCR gene; cells derived
CC from the transgenic mice; kits comprising several mice, each of which has
CC a mutation in a different GPCR gene of the invention; and kits comprising
CC probes which hybridise to GPCR polynucleotides of the invention. The
CC invention further discloses variants of the GPCR polypeptides and vectors
CC comprising a GPCR nucleic acid. The GPCR nucleic acids and proteins may
CC be used in the diagnosis, treatment or prevention of a wide variety of
CC diseases including neurological disorders (e.g., Alzheimer's disease,
CC depression, diabetic neuropathy, Parkinson's disease or schizophrenia);
CC disorders of the adrenal gland; disorders of the colon or intestine
CC (e.g., Crohn's disease, diarrhoea, food poisoning or irritable bowel
CC syndrome); cardiovascular disorders (e.g., angina, cardiac arrhythmia or
CC myocardial infarction); muscular disorders; blood disorders (e.g.,
CC anaemia or leukaemia); immune disorders (e.g., autoimmune disorders or
CC AIDS); bone and joint disorders (e.g., osteoarthritis, rheumatoid
CC arthritis, gout or osteoporosis); metabolic or nutritive disorders (e.g.,
CC obesity, enzyme deficiency-related diseases or vitamin deficiency-related
CC diseases); and disorders of the kidney, liver, lung, breast, ovary,
CC uterus, prostate, testis, skin, stomach, pancreas, spleen, thymus and
CC thyroid (e.g., cancers). The present sequence represents a GPCR of the
CC invention. Note: The full sequence data for this patent did not form part
CC of the printed specification; those sequences not shown were obtained in
CC electronic format directly from WIP0 at
CC ftp.wipo.int/pub/published_pct_sequences.

CC Sequence 411 AA;

CC Query Match 94.7%; Score 2111; DB 8; Length 411;

CC Best Local Similarity 93.9%; Pred. No. 1.3e-20;

CC Matches 386; Conservative 13; Mismatches 12; Indels 0; Gaps 0;

QY 1 MDALLHSLBANCSLALAEELLDGMPPLDPBPSPYSCNTTLDQIGTCWPRSAAGLV 60
Db 1 MDALLHSLBANCSLALAEELLDGMPPLDPBPSPYSCNTTLDQIGTCWPRSAAGLV 60
QY 61 ERPCPEYNGIKYNTTRNAVRECLENGWASRINYSHCEPILDDKORKYDLHYRIALJIN 120
Db 61 ERPCPEYNGVAVNTTRNAVRECLENGWASKINYSQCEPILDDKORKYDLHYRIALVYN 120
QY 121 YLGHCVSVAALVAALFLPLVLRISIRCLRNVIHNMNLTITFILRNVTMFLQILDHEVHSGN 180
Db 121 YLGHCVSVAALVAALFLPLVLRISIRCLRNVIHNMNLTITFILRNVTMFLQILDHEVHSGN 180
QY 181 EVMGRCVTTINNYFVNTNFMFVFGCYLHAIWMTYSTEHRLKMLFPIGMCIPPIIV 240
Db 181 EVMGRCVTTINNYFVNTNFMFVFGCYLHAIWMTYSTEHRLKMLFPIGMCIPPIIV 240
QY 241 AMAVGLKYENEDQCFGKEPGLVDVYIYOGPIILVLLINVFVLFNIVAILMTKLRASSTTS 300
Db 241 AMAVGLKYENEDQCFGKEPGLVDVYIYOGPIILVLLINVFVLFNIVAILMTKLRASSTTS 300
QY 301 ETIQYRKAVKATLVLLPLGITYMLFVNPGEDDLSQIVFIYNSFLOSFGGFFVSFVYC 360
Db 301 ETIQYRKAVKATLVLLPLGITYMLFVNPGEDDLSQIMFIYNSFLOSFGGFFVSFVYC 360
QY 361 FFNGEVSALRKWRHMODHSLRVPMARAMSIPSPRISFHSIKOTAAV 411
Db 361 FFNGEVSALRKWRHMODHSLRVPMARAMSIPSPRISFHSIKOTAAV 411

```

RESULT 9
AAR90576
ID AAR90576 standard; protein; 411 AA.
XX
AC AAR90576;
XX
DT 08-APR-1996 (first entry)
XX
DE Human CRF2 receptor.
XX
KW CRF2 receptor; corticotropin-releasing factor-2 receptor;
XX   cerebrovascular disorder; memory disorder; Alzheimer disease.
XX
OS Homo sapiens.
XX
PN W09534651-A2.
XX
PD 21-DEC-1995.
XX
PF 14-JUN-1995; 95WO-US007757.
XX
PR 14-JUN-1994; 94US-00259959.
XX   31-JAN-1995; 95US-00381433.
XX   07-JUN-1995; 95US-00485984.
XX
PA (NEUR-) NEUROCRINE BIOSCIENCES INC.
XX
PI Chalmers D, Lovenberg TW, Oltersdorf T, Liaw CW, Grigoriadis DE;
PI De Souza EB;
XX
DR WPI; 1996-049680/05.
XX   N-PSDB; AAT12247.
XX
PT Corticotropin-releasing factor-2 receptor, and DNA encoding it - used to
PT isolate CRF-2 receptor antagonists for the treatment of cerebrovascular
PT disorders, memory disorders and Alzheimer's disease.
XX
PS Disclosure; Page 80-82; 109pp; English.
XX
XX Human corticotropin-releasing factor-2 (CRF2) receptor (AAR90576) is a
XX membrane-bound G-coupled protein receptor involved in signal
XX transduction. It can be produced by expression of encoding cDNA
XX (AAT12247) in prokaryotic or eucaryotic host cells. Recombinant CRF2
XX receptor is used to screen CRF2 receptor agonists and antagonists of
XX therapeutic appln., and to prepare antibodies which specifically bind to
XX CRF2 receptors
XX
SQ Sequence 411 AA;
XX
Query Match          94.5%; Score 2106; DB 2; Length 411;
Best Local Similarity 93.7%; Pred. No. 3.9e-200;
Matches 385; Conservative 13; Mismatches 13; Indels 0; Gaps 0;
XX
QY 1 MDAALLSLLEAÑCSIALAEELLDDGMPDPPEGPGYSYCNNTLDQIGTCWPSAGALV 60
DB 1 MDAALLSLLEAÑCSIALAEELLDDGMPDPPEGPGYSYCNNTLDQIGTCWPSAGALV 60
XX
QY 61 ERPCPEYFNGIKYNTTRNAYRECLNGTWASRINSHCEPIILDDKORKYDLHYRIALIN 120
DB 61 ERPCPEYFNGIKYNTTRNAYRECLNGTWASRINSHCEPIILDDKORKYDLHYRIALIN 120
XX
QY 61 ERPCPEYFNGIKYNTTRNAYRECLNGTWASRINSHCEPIILDDKORKYDLHYRIALIN 120
DB 61 ERPCPEYFNGIKYNTTRNAYRECLNGTWASRINSHCEPIILDDKORKYDLHYRIALIN 120
XX
QY 121 YGHCYSVALVAALFLPLVLRISIRCLRVNIHNNLTFTFLRNITWELQLIDHEVHEGN 180
DB 121 YGHCYSVALVAALFLPLVLRISIRCLRVNIHNNLTFTFLRNITWELQLIDHEVHEGN 180
XX
QY 181 EVMCRCTTIFNFVFVNTFPMFVEGECYLTATVMTYSTELRKMFLFIWMCIPQITV 240
DB 181 EVMCRCTTIFNFVFVNTFPMFVEGECYLTATVMTYSTELRKMFLFIWMCIPQITV 240
XX
QY 241 ANAVGLYIENECQFGKEPGLVDYIYOGPIILVLLINFLVFNIVIRIIMTKLASTS 300
DB 241 ANAVGLYIENECQFGKEPGLVDYIYOGPIILVLLINFLVFNIVIRIIMTKLASTS 300
XX

```

```

RESULT 10
AAO19424
ID AAO19424 standard; protein; 411 AA.
XX
AC AAO19424;
XX
DT 10-DEC-2002 (first entry)
XX
DE Human corticotrophin releasing factor receptor CRF2Ralpha.
XX
KW Human; rat; mouse; sheep; cow; chicken; CRF1R; CRF2R;
KW skeletal muscle atrophy; corticotrophin releasing factor-2 receptor;
KW muscular dystrophy; corticotrophin releasing factor-1 receptor;
KW gene therapy.
XX
OS Homo sapiens.
XX
PN W0200269908-A2.
XX
PD 12-SEP-2002.
XX
PF 06-MAR-2002; 2002WO-US007476.
XX
PR 06-MAR-2001; 2001US-00799978.
XX
PA (PROC) PROCTER & GAMBLE CO.
XX
PI Isfort RJ, Sheldon RJ;
XX
DR WPI; 2002-713413/77.
XX   N-PSDB; AAI49975.
XX
PT Identifying candidate compounds for regulating skeletal muscle mass or
PT treating skeletal muscle atrophy by identifying test compounds that bind
PT to, or activate, the corticotropin releasing factor-2 receptor.
XX
PS Claim 7; Page 95-97; 167pp; English.
XX
XX The present invention relates to a method of identifying candidate
XX compounds for regulating skeletal muscle mass or function, and comprises
XX contacting a test compound with a corticotropin releasing factor-2
XX receptor (CRF2R) or with a cell expressing a functional CRF2R, the CRF2R
XX determining whether the test compound binds to, or activates, the CRF2R
XX and identifying the test compounds that bind to, or activates, the CRF2R
XX as candidate compounds for regulating skeletal muscle mass or function.
XX The method is useful for preparing a medicament for treating skeletal
XX muscle atrophy or for prophylactic treatment of muscular dystrophies. The
XX present sequence is a corticotropin releasing factor receptor
XX
SQ Sequence 411 AA;
XX
Query Match          94.5%; Score 2106; DB 5; Length 411;
Best Local Similarity 93.7%; Pred. No. 3.9e-200;
Matches 385; Conservative 13; Mismatches 13; Indels 0; Gaps 0;
XX
QY 1 MDAALLSLLEAÑCSIALAEELLDDGMPDPPEGPGYSYCNNTLDQIGTCWPSAGALV 60
DB 1 MDAALLSLLEAÑCSIALAEELLDDGMPDPPEGPGYSYCNNTLDQIGTCWPSAGALV 60
XX
QY 61 ERPCPEYFNGIKYNTTRNAYRECLNGTWASRINSHCEPIILDDKORKYDLHYRIALIN 120
DB 61 ERPCPEYFNGIKYNTTRNAYRECLNGTWASRINSHCEPIILDDKORKYDLHYRIALIN 120
XX

```

QY 121 YLGHCVSAVAALVAAPFLVLRSLRCLRNVTIHMNIITTFILNITWFLQLIDHVRHGN 180
DB 121 YLGHCVSAVAALVAAPFLVLRSLRCLRNVTIHMNIITTFILNITWFLQLIDHVRHGN 180
QY 181 EVMCRVTTTFNFYVVTNFPMFVEGCVLHTAIWMTYSTEHRLKMLFPIGMCIPCIIV 240
DB 181 EVMCRVTTTFNFYVVTNFPMFVEGCVLHTAIWMTYSTEHRLKMLFPIGMCIPCIIV 240
QY 241 AMAVSKLYENECQCFGKEPGDLVDYIYQGPILLVLLINPVELFNIVIRILMTKLRASFTS 300
DB 241 AMAVSKLYENECQCFGKEPGDLVDYIYQGPILLVLLINPVELFNIVIRILMTKLRASFTS 300
QY 301 ETIOYRKAVKATLVLLPLIGITVYMLFVNVPGEDDLQIVFIYFNSFLQSPGFVSVFYC 360
DB 301 ETIOYRKAVKATLVLLPLIGITVYMLFVNVPGEDDLQIVFIYFNSFLQSPGFVSVFYC 360
QY 361 FFMGEVSALRKRWHRMODHHLRVPVARSISPTSPRISFHSIKOTAAV 411
DB 361 FFMGEVSALRKRWHRMODHHLRVPVARSISPTSPRISFHSIKOTAAV 411

RESULT 11
ABP81806
ID ABP81806 standard; protein; 411 AA.
AC ABP81806;
DT 04-MAR-2003 (first entry)
DE Human corticotropin releasing factor receptor 2 protein SBQ ID NO:96.
XX G protein-coupled receptor; GPCR; antigenic peptide; gene therapy;
XX G protein-coupled receptor modulator; antibody; immune-related disease;
XX growth-related disease; cell regeneration-related disease; AIDS; cancer;
XX immunological-related cell proliferative disease; autoimmune disease;
XX Alzheimer's disease; atherosclerosis; infection; osteoarthritis; allergy;
XX osteoporosis; cardiomyopathy; inflammation; Crohn's disease; diabetes;
XX graft versus host disease; Parkinson's disease; multiple sclerosis; pain;
XX psoriasis; anxiety; depression; schizophrenia; dementia; memory loss;
XX mental retardation; epilepsy; asthma; tuberculosis; obesity; nausea;
XX hypertension; hypotension; renal disorder; rheumatoid arthritis; trauma;
XX ulcer.
OS Homo sapiens.
XX
XX WO200261087-A2.
XX
XX 08-AUG-2002.
XX
XX 19-DEC-2001; 2001WO-US050107.
XX
XX 19-DEC-2000; 2000US-0257144P.
XX
XX 19-DEC-2000; 2000US-0257144P.
XX
XX (LIFE-) LIFESPAN BIOSCIENCES INC.
XX
XX Burner GC, Roush CL, Brown JP;
XX
XX MPI; 2003-046718/04.
XX
XX N-PSDB; AB242652.
XX
XX New isolated antigenic peptides e.g., for G protein-coupled receptors
XX (GPCR), useful for diagnosing and designing drugs for treating conditions
XX in which GPCRs are involved, e.g. AIDS, Alzheimer's disease, cancer or
XX autoimmune diseases.
XX
XX Disclosure; Fig 1; 533pp; English.
XX
XX The present invention describes antigenic peptides (I) comprising: (a)
XX any one of 1601 sequences (see ABP82019 to ABP8319) of 12-24 amino
XX acids. Also described: (1) an assay for the detection of a particular G
XX protein-coupled receptor (GPCR) or a candidate polypeptide in a sample;
XX and (2) an isolated antibody having high specificity and high affinity or
XX avidity for a particular GPCR. (I) can be used as GPCR modulators and in

CC gene therapy. The antigenic peptides for GPCRs are useful in detecting an
CC antibody against a particular GPCR, and in the production of specific
CC antibodies. The peptides and antibodies are also useful for detecting the
CC presence or absence of corresponding GPCRs. The antigenic peptides for
CC GPCRs and antibodies are useful for diagnosing and designing drugs for
CC treating immune-related diseases, growth-related diseases, cell
CC regeneration-related disease, immunological-related cell proliferative
CC diseases, or autoimmune diseases, e.g. AIDS, Alzheimer's disease,
CC atherosclerosis, bacteremia, fungal, protozoan or viral infections,
CC osteoarthritis, osteoporosis, cancer, cardiomyopathy, chronic and acute
CC inflammation, allergies, Crohn's disease, diabetes, graft versus host
CC disease, Parkinson's disease, multiple sclerosis, pain, psoriasis,
CC anxiety, depression, schizophrenia, dementia, mental retardation, memory
CC loss, epilepsy, asthma, tuberculosis, obesity, nausea, hypertension,
CC hypotension, renal disorders, rheumatoid arthritis, trauma, ulcers, or
CC any other disorder in which GPCRs are involved. The antibodies may be
CC used in immunoassays and immunodiagnosis. AB242523 to AB242869 encode
CC GPCR proteins given in ABP81675 to ABP82018, which are used in the
CC exemplification of the present invention
XX
XX SQ Sequence 411 AA;

Query Match 94.5%; Score 2106; DB 6; Length 411;
Best Local Similarity 93.7%; Pred. No. 3.9e-200;
Matches 385; Conservative 13; Mismatches 13; Indels 0; Gaps 0;

QY 1 MDAALLSLRANCSLALAEELLIDGMEPPDPPEGPYSYCTTLDQIGTCWPOSAGALV 60
DB 1 MDAALLSLRANCSLALAEELLIDGMEPPDPPEGPYSYCTTLDQIGTCWPOSAGALV 60
QY 61 ERPCPEYNGIKNTTNAHYECLENGTWASRINYSHCPEILLDKORKYDHYRIALIIIN 120
DB 61 ERPCPEYNGIKNTTNAHYECLENGTWASRINYSHCPEILLDKORKYDHYRIALIIIN 120
QY 121 YLGHCVSAVAALVAAPFLVLRSLRCLRNVTIHMNIITTFILNITWFLQLIDHVRHGN 180
DB 121 YLGHCVSAVAALVAAPFLVLRSLRCLRNVTIHMNIITTFILNITWFLQLIDHVRHGN 180
QY 181 EVMCRVTTTFNFYVVTNFPMFVEGCVLHTAIWMTYSTEHRLKMLFPIGMCIPCIIV 240
DB 181 EVMCRVTTTFNFYVVTNFPMFVEGCVLHTAIWMTYSTEHRLKMLFPIGMCIPCIIV 240
QY 241 AMAVSKLYENECQCFGKEPGDLVDYIYQGPILLVLLINPVELFNIVIRILMTKLRASFTS 300
DB 241 AMAVSKLYENECQCFGKEPGDLVDYIYQGPILLVLLINPVELFNIVIRILMTKLRASFTS 300
QY 301 ETIOYRKAVKATLVLLPLIGITVYMLFVNVPGEDDLQIVFIYFNSFLQSPGFVSVFYC 360
DB 301 ETIOYRKAVKATLVLLPLIGITVYMLFVNVPGEDDLQIVFIYFNSFLQSPGFVSVFYC 360
QY 361 FFMGEVSALRKRWHRMODHHLRVPVARSISPTSPRISFHSIKOTAAV 411
DB 361 FFMGEVSALRKRWHRMODHHLRVPVARSISPTSPRISFHSIKOTAAV 411

RESULT 12
ADO50791
ID ADO50791 standard; protein; 411 AA.
AC ADO50791;
DT 12-AUG-2004 (first entry)
DE Human corticotropin releasing factor receptor 2 alpha.
XX
XX Human, receptor; corticotropin releasing factor receptor; CRF1R; CRF2R;
XX skeletal muscle; muscle atrophy; skeletal muscle dystrophy;
XX skeletal muscle hypertrophy; surgery; bed rest; broken bone;
XX infectious disease; AIDS cachexia.
OS Homo sapiens.
XX
XX US2004101911-A1.

XX 27-MAY-2004.
 XX
 XX 27-AUG-2003; 2003US-00649852.
 XX
 XX 06-MAR-2001; 2001US-00799978.
 XX
 XX (PROC) PROCTER & GAMBLE CO.
 XX
 XX Isfort RJ, Sheldon RJ;
 XX
 XX WPI: 2004-459890/43.
 XX N-PSDB; AD050790.
 XX
 XX Identifying compounds for regulating skeletal muscle mass or function, by
 XX contacting test compound with vertebrate corticotropin releasing factor2
 XX receptors (CRF2R), selecting compounds that bind or activate CRF2R.
 XX
 XX Claim 3; SEQ ID NO 10; 100pp; English.
 XX
 XX The invention relates to identifying candidate compounds for regulating
 XX skeletal muscle mass or function, comprising contacting a test compound
 XX with vertebrate corticotropin releasing factor 2 receptors (CRF 2 R),
 XX determining if the compound binds to or activates CRF2R, selecting
 XX compounds that bind or activate CRF 2 R, and determining if compound
 XX increases muscle mass or function in muscle atrophy model. Also included
 XX are identifying candidate therapeutic compounds from a group of one or
 XX more candidate compounds which have been previously determined to bind to
 XX or activate a vertebrate CRF 2 R (comprising administering the candidate
 XX compound to a non-human animal and determining whether the candidate
 XX compound regulates skeletal muscle mass or function in the treated
 XX animal), increasing skeletal muscle mass or function in a subject in
 XX which such an increase is desirable (comprising identifying a subject in
 XX which an increase in muscle mass or function is desirable and
 XX administering to the subject a safe and effective amount of a CRF 2 R
 XX agonist), a purified antibody specific for a CRF2R (where the antibody is
 XX a chimeric or human antibody), and a pharmaceutical composition
 XX comprising a safe and effective amount of a CRF2R agonist and carrier.
 XX The methods are useful for identifying candidate compounds for regulating
 XX skeletal muscle mass or function, for increasing skeletal muscle mass or
 XX function (in a subject in which an increase is desirable), for
 XX identifying candidate compounds that are potentially useful in the
 XX treatment of skeletal muscle dystrophy and for identifying compounds that
 XX prolong or augment the agonist-induced activation of CRF2R or of a CRF2R
 XX signal transduction pathway. The compound is useful for treating skeletal
 XX muscle hypertrophy and for modulating skeletal muscle atrophy induced by
 XX e.g. surgery, bed rest, broken bones, infectious disease or AIDS.
 XX cachexia. The present sequence represents a corticotropin releasing
 XX factor receptor.
 XX
 XX Sequence 411 AA;
 XX
 XX Query Match 94.5%; Score 2106; DB 8; Length 411;
 XX Best Local Similarity 93.7%; Pred. No. 3.9e-200;
 XX Matches 385; Conservative 13; Mismatches 13; Indels 0; Gaps 0;
 XX
 QY 1 MPAALTLSTLEBANCSALABELLLDGMGEPPDEPGYSYCNLTLDIGTCWPSAAGALV 60
 XX |||||
 DB 1 MDALHLSLEBANCSALABELLLDGMGEPPDEPGYSYCNLTLDIGTCWPSAAGALV 60
 QY 61 EBPCEPEYFNGIKYKNTTNNAYRECLNGTWAASRINYSCHCEPILDDOKRYDLHYRIALIN 120
 XX |||||
 DB 61 EBPCEPEYFNGIKYKNTTNNAYRECLNGTWAASRINYSCHCEPILDDOKRYDLHYRIALIN 120
 QY 121 YGHCYSVALVAALFLFLVLSIRCLRVNTHNNLITTFILRVNMFLLQLVDHEVHEEN 180
 XX |||||
 DB 121 YGHCYSVALVAALFLFLVLSIRCLRVNTHNNLITTFILRVNMFLLQLVDHEVHEEN 180
 QY 181 EVMGRCVTTTFNNFVVTNPFMMFVEGCVLHTATVMYVSTHKKMLFLFGMCIPCPITV 240
 XX |||||
 DB 181 EVMGRCVTTTFNNFVVTNPFMMFVEGCVLHTATVMYVSTHKKMLFLFGMCIPCPITV 240
 QY 241 AWAAGKLYENECQWKEBGLVDYIYOGPIILVLLINFLNIVRIIMTKRASTTS 300
 XX |||||

DB 241 AWAAGKLYENECQWKEBGLVDYIYOGPIILVLLINFLNIVRIIMTKRASTTS 300
 QY 301 ETIOYRKAVKATLVLLPLLGITVLMFFVNGEDDLSQIVFIYNSFLQSGFQFVSVFYC 360
 DB 301 ETIOYRKAVKATLVLLPLLGITVLMFFVNGEDDLSQIVFIYNSFLQSGFQFVSVFYC 360
 QY 361 FNGEVSALARKRMRWODHSLRVVVARMSIPSPTRISHSIKQTAAY 411
 DB 361 FNGEVSALARKRMRWODHSLRVVVARMSIPSPTRISHSIKQTAAY 411
 RESULT 13
 ADQ89168
 ID ADQ89168 standard; protein; 411 AA.
 XX
 AC ADQ89168;
 XX
 DT 21-OCT-2004 (first entry)
 XX
 DE Human urological disorder related protein 2543 SEQ.120.
 XX
 KW urological disorder; uropathic; cytostatic; urinary incontinence;
 KW benign prostatic hyperplasia; human.
 XX
 OS Homo sapiens.
 XX
 PN MO2004065576-A2.
 XX
 PD 05-AUG-2004.
 XX
 PF 14-JAN-2004; 2004WO-US000750.
 XX
 PR 15-JAN-2003; 2003US-0440318P.
 XX
 PR 04-FEB-2003; 2003US-0444783P.
 XX
 PR 27-MAR-2003; 2003US-0457901P.
 XX
 PR 08-MAY-2003; 2003US-0468775P.
 XX
 PR 19-MAY-2003; 2003US-0471614P.
 XX
 PR 16-JUN-2003; 2003US-0478742P.
 XX
 PR 18-JUL-2003; 2003US-0488529P.
 XX
 PR 30-JUL-2003; 2003US-0491156P.
 XX
 PR 02-SEP-2003; 2003US-0495949P.
 XX
 PR 26-SEP-2003; 2003US-0506332P.
 XX
 PA (MILL-) MILLENNIUM PHARM INC.
 XX
 PI Karichevi V, Silos-Santiago I, Eliasof SD;
 XX
 DR WPI: 2004-562167/54.
 XX
 DR N-PSDB; ADQ89167.
 XX
 PT Use of polypeptides related to urological disorders, e.g. 44390, 54181,
 PT 211 or for identifying a compound capable of treating a urological
 PT disorder or identifying and treating a subject having a urological
 PT disorder.
 XX
 PS Claim 1; SEQ ID NO 120; 542pp; English.
 XX
 CC The present invention describes the use of polypeptides related to
 CC urological disorders for identifying a compound capable of treating a
 CC urological disorder, identifying a subject having a urological disorder,
 CC or treating a subject having a urological disorder. Also described: (1) a
 CC method for identifying a compound capable of treating a urological
 CC disorder; (2) a method for identifying a subject having a urological
 CC disorder; and (3) a method for treating a subject having a urological
 CC disorder. The compound has uropathic and cytostatic activities. The
 CC polypeptides related to urological disorders are useful for identifying a
 CC compound capable of treating a urological disorder, identifying a subject
 CC having a urological disorder, or treating a subject having a urological
 CC disorder. Disorders include urinary incontinence and benign prostatic
 CC hyperplasia. The present sequence represents a human urological disorder
 CC related protein, which is used in the exemplification of the present
 CC invention.

```

XX Sequence 411 AA;
SQ Query Match
      94.5%; Score 2106; DB 8; Length 411;
      Best Local Similarity 93.7%; Pred. No. 3.9e-200;
      Matches 385; Conservative 13; Mismatches 11; Indels 0; Gaps 0;

OY 1 MDALLSLLEANCSLAAEELLDDGKGPDPDEGPGYSCTNTLDQIGTCWPSAGALV 60
DB 1 MDALLSLLEANCSLAAEELLDDGKGPDPDEGPGYSCTNTLDQIGTCWPSAGALV 60
OY 61 ERPCPEYNGIKYNTTRNAYRECLNGTWASRINSHOEPLDDKORXYDLHYRIALLIN 120
DB 61 ERPCPEYNGIKYNTTRNAYRECLNGTWASRINSHOEPLDDKORXYDLHYRIALLIN 120
OY 121 YLGHCVSVAAVLAFLPLGLITVMSIRCLRNVIHNNLITTFILNITWFLQLIDHEVHGN 180
DB 121 YLGHCVSVAAVLAFLPLGLITVMSIRCLRNVIHNNLITTFILNITWFLQLIDHEVHGN 180
OY 181 EVMCRCTVTIENYFVVTNPFVMEVEGCVLHTAIWMTYSTELRKMLPLFGMCIPCIIV 240
DB 181 EVMCRCTVTIENYFVVTNPFVMEVEGCVLHTAIWMTYSTELRKMLPLFGMCIPCIIV 240
OY 241 AMAVKLKYENOCQKGEKPGDLVDYIYOGPIILVILINFEVLEIVRIIMTKLRASSTS 300
DB 241 AMAVKLKYENOCQKGEKPGDLVDYIYOGPIILVILINFEVLEIVRIIMTKLRASSTS 300
OY 301 ETIOYRKAVKATLVLLPLGITVYMLFVNPGEDLSQIYFIYNSFLOSFOGFFVSVFYC 360
DB 301 ETIOYRKAVKATLVLLPLGITVYMLFVNPGEDLSQIYFIYNSFLOSFOGFFVSVFYC 360
OY 361 PFNGVRSALRKRWKMODHNLAVPARAMSIPTSPTRISFHSIKQTAAY 411
DB 361 PFNGVRSALRKRWKMODHNLAVPARAMSIPTSPTRISFHSIKQTAAY 411

RESULT 14
ABU62364
ID ABU62364 standard; protein; 431 AA.
XX AC ABU62364;
XX DT 29-AUG-2003 (first entry)
XX DE Rat corticotropin release factor receptor, rCRF-R2beta.
XX KW ACTH; blood flow; blood pressure; receptor; adrenocorticotrophic hormone;
KW inflammation; vascular permeability; CRF-binding protein; blood flow;
KW Alzheimer's disease; chronic fatigue syndrome; appetite; alertness; rat;
KW respiratory system; learning performance; depression; anxiety; memory;
KW hypothalamic pituitary adrenal function; endocrine disorder; swelling;
KW central nervous system disorder; CRF; rCRF-R2beta.
XX OS Rattus sp.
XX PN US2003032587-A1.
XX PD 13-FEB-2003.
XX PF 26-MAR-2001; 2001US-00818009.
XX PR 13-JUN-1995; 95US-0028444P.
XX PR 11-AUG-1995; 95US-0022233P.
XX PR 12-JUN-1996; 96WO-US010240.
XX PR 10-DEC-1997; 97US-00981189.
XX PA (SALK ) SALK INST BIOLOGICAL STUDIES.
XX PI Vale MW, Vaughan J, Donaldson CJ, Lewis KA, Sawchenko P;
XX PI Rivier JEF, Perrin MH;
XX WPI, 1997-077344/07.

```

```

XX XX
PT Urocortin peptide(s) related to urocensin and corticotropin-releasing
PT factor - for increasing ACTH and beta-endorphin levels, lowering blood
PT pressure and improving mood, memory and learning performance.
PS Disclosure: Page 29-30; 34pp; English.
XX CC The invention relates to a human urocortin (Ucn) peptide or an analogous
XX CC sequence having only conservative substitutions to the amino acid
XX CC residues in it, or an N-terminally shortened fragment of either which is
XX CC biologically active to increase adrenocorticotrophic hormone (ACTH)
XX CC production. Human urocortin or its N-terminally shortened antagonist
XX CC peptide are useful for modifying blood flow and/or blood pressure and is
XX CC further useful for modulating blood flow in a desired vascular bed. Human
XX CC urocortin is also useful for increasing coronary blood flow and for
XX CC decreasing swelling and/or inflammation and/or vascular permeability. A
XX CC CRF-binding protein blocking compound is useful for increasing the in
XX CC vivo level of CRF and/or Ucn. The amount of CRF-binding protein blocking
XX CC compound is sufficient to promote parturition in a pregnant female. The
XX CC amount of the compound administered is effective so as to result in an
XX CC increase in free endogenous CRF and/or Ucn in the brain which causes
XX CC improvement in short to medium term memory in a subject afflicted with
XX CC Alzheimer's disease, relief from chronic fatigue syndrome, suppression of
XX CC appetite, stimulation of the respiratory system, improvement in learning
XX CC performance, improvement in memory, improvement in alertness, reduction
XX CC of depression and/or lessening of anxiety. The compound is administered
XX CC so that it reaches the brain. Human urocortin is useful for evaluating
XX CC hypothalamic pituitary adrenal function in mammals with suspected
XX CC endocrine or central nervous system pathology. Human urocortin antibodies
XX CC are useful in diagnostic methods and systems for detecting the level of
XX CC ucn polypeptide, for immunoaffinity or affinity chromatography
XX CC purification of Ucn, and also in human therapeutic methods. The present
XX CC sequence represents the amino acid sequence of the rat corticotropin
XX CC release factor receptor, rCTF-R2beta
XX SQ Sequence 431 AA;
XX Query Match
      92.3%; Score 2055.5; DB 2; Length 431;
XX Best Local Similarity 94.1%; Pred. No. 4.4e-195;
XX Matches 382; Conservative 1; Mismatches 12; Indels 11; Gaps 1;

OY 6 LLSLEANCSLAAEELLDDGKGPDPDEGPGYSCTNTLDQIGTCWPSAGALVERPCP 65
DB 37 LMTLBOYCHRTTRNF-----SGPYSCNTTLDQIGTCWPSAGALVERPCP 85
OY 66 EYFNGIKYNTTRNAYRECLNGTWASRINSHOEPLDDKORXYDLHYRIALLINYLGHG 125
DB 86 EYFNGIKYNTTRNAYRECLNGTWASRINSHOEPLDDKORXYDLHYRIALLINYLGHG 145
OY 126 VSVVALVAAPLPLFLVLSIRCLRNVIHNNLITTFILNITWFLQLIDHEVHGNVWCR 185
DB 146 VSVVALVAAPLPLFLVLSIRCLRNVIHNNLITTFILNITWFLQLIDHEVHGNVWCR 205
OY 186 CVTTIENYFVVTNPFVMEVEGCVLHTAIWMTYSTELRKMLPLFGMCIPCIIVAMAVG 245
DB 206 CVTTIENYFVVTNPFVMEVEGCVLHTAIWMTYSTELRKMLPLFGMCIPCIIVAMAVG 265
OY 246 KLYYENECQKGEKPGDLVDYIYOGPIILVILINFEVLEIVRIIMTKLRASSTSETIOY 305
DB 266 KLYYENECQKGEKPGDLVDYIYOGPIILVILINFEVLEIVRIIMTKLRASSTSETIOY 325
OY 306 RKAVALTVLLPLGLITVYMLFVNPGEDLSQIYFIYNSFLOSFOGFFVSVFYCFENGE 365
DB 326 RKAVALTVLLPLGLITVYMLFVNPGEDLSQIYFIYNSFLOSFOGFFVSVFYCFENGE 385
OY 386 VRSALRKRWKMODHNLAVPARAMSIPTSPTRISFHSIKQTAAY 411
DB 386 VRSALRKRWKMODHNLAVPARAMSIPTSPTRISFHSIKQTAAY 431

RESULT 15
AAR90575
ID AAR90575 standard; protein; 431 AA.

```


This Page Blank (uspto)

GenCore version 5.1.6
Copyright (c) 1993 - 2005 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: October 3, 2005, 07:54:29 ; Search time 93 Seconds
(without alignments)
1834.545 Million cell updates/sec

Title: US-10-821-502-4
Perfect score: 2228
Sequence: 1 MDALLSLLEAMCSLALAE.....SIPSPTRISFHSIKOTAAV 411

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1846076 seqs, 415116000 residues

Total number of hits satisfying chosen parameters: 1846076

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published Applications AA.*
1: /cgn2_6/ptodata/2/pubpaa/US07_PUBCOMB.pep.*
2: /cgn2_6/ptodata/2/pubpaa/PCT_NEW_PUB.pep.*
3: /cgn2_6/ptodata/2/pubpaa/US05_NEW_PUB.pep.*
4: /cgn2_6/ptodata/2/pubpaa/US06_NEW_PUB.pep.*
5: /cgn2_6/ptodata/2/pubpaa/US07_NEW_PUB.pep.*
6: /cgn2_6/ptodata/2/pubpaa/PCTUS_PUBCOMB.pep.*
7: /cgn2_6/ptodata/2/pubpaa/US08_NEW_PUB.pep.*
8: /cgn2_6/ptodata/2/pubpaa/US08_PUBCOMB.pep.*
9: /cgn2_6/ptodata/2/pubpaa/US09_PUBCOMB.pep.*
10: /cgn2_6/ptodata/2/pubpaa/US09B_PUBCOMB.pep.*
11: /cgn2_6/ptodata/2/pubpaa/US09C_PUBCOMB.pep.*
12: /cgn2_6/ptodata/2/pubpaa/US09_NEW_PUB.pep.*
13: /cgn2_6/ptodata/2/pubpaa/US10A_PUBCOMB.pep.*
14: /cgn2_6/ptodata/2/pubpaa/US10B_PUBCOMB.pep.*
15: /cgn2_6/ptodata/2/pubpaa/US10C_PUBCOMB.pep.*
16: /cgn2_6/ptodata/2/pubpaa/US10E_PUBCOMB.pep.*
17: /cgn2_6/ptodata/2/pubpaa/US10F_PUBCOMB.pep.*
18: /cgn2_6/ptodata/2/pubpaa/US11A_PUBCOMB.pep.*
19: /cgn2_6/ptodata/2/pubpaa/US11B_PUBCOMB.pep.*
20: /cgn2_6/ptodata/2/pubpaa/US11_NEW_PUB.pep.*
21: /cgn2_6/ptodata/2/pubpaa/US11_NEW_PUB.pep.*
22: /cgn2_6/ptodata/2/pubpaa/US60_PUBCOMB.pep.*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	2228	100.0	411	9	US-09-881-401-4
2	2228	100.0	411	10	US-09-818-009-12
3	2228	100.0	411	10	US-09-799-978-18
4	2228	100.0	411	16	US-10-649-852-18
5	2228	100.0	411	16	US-10-821-502-4
6	2111	94.7	411	15	US-10-292-798-636
7	2106	94.5	411	9	US-09-881-401-8
8	2106	94.5	411	10	US-09-799-978-10
9	2106	94.5	411	14	US-10-225-567A-96
10	2106	94.5	411	16	US-10-649-852-10
11	2106	94.5	411	16	US-10-821-502-8

12	2106	94.5	411	16	US-10-757-262-120	Sequence 120, App
13	2055.5	92.3	431	9	US-09-881-401-2	Sequence 2, Appl1
14	2055.5	92.3	431	10	US-09-818-009-13	GENERAL INFORMA
15	2055.5	92.3	431	16	US-10-821-502-2	Sequence 2, Appl1
16	2042.5	91.7	431	16	US-09-799-978-20	Sequence 20, Appl1
17	2042.5	91.7	431	16	US-10-649-852-20	Sequence 20, Appl1
18	2026.5	91.0	431	9	US-09-191-724-10	Sequence 10, Appl1
19	2026.5	91.0	431	10	US-09-818-009-11	GENERAL INFORMA
20	2026.5	91.0	431	10	US-09-799-978-24	Sequence 24, Appl1
21	2026.5	91.0	431	15	US-10-649-193-10	Sequence 10, Appl1
22	2026.5	91.0	431	16	US-10-649-852-24	Sequence 24, Appl1
23	1999	89.7	430	9	US-09-853-386-140	Sequence 140, App
24	1999	89.7	430	10	US-09-799-978-26	Sequence 26, Appl1
25	1999	89.7	430	16	US-10-649-852-26	Sequence 26, Appl1
26	1963	88.1	397	10	US-09-799-978-14	Sequence 14, Appl1
27	1963	88.1	397	16	US-10-649-852-14	Sequence 14, Appl1
28	1962	88.1	438	10	US-09-799-978-12	Sequence 12, Appl1
29	1962	88.1	438	16	US-10-649-852-12	Sequence 12, Appl1
30	1962	88.1	438	17	US-10-482-029-178	Sequence 178, App
31	1793	80.5	413	10	US-09-799-978-32	Sequence 32, Appl1
32	1793	80.5	413	16	US-10-649-852-32	Sequence 32, Appl1
33	1787	80.2	405	10	US-09-799-978-18	Sequence 38, Appl1
34	1787	80.2	405	16	US-10-649-852-38	Sequence 38, Appl1
35	1593	71.5	420	9	US-09-853-386-129	Sequence 129, App
36	1593	71.5	420	10	US-09-799-978-42	Sequence 42, Appl1
37	1593	71.5	420	16	US-10-649-852-42	Sequence 42, Appl1
38	1574	70.6	415	9	US-09-191-724-2	Sequence 2, Appl1
39	1574	70.6	415	10	US-09-799-978-2	Sequence 2, Appl1
40	1574	70.6	415	10	US-09-799-978-4	Sequence 4, Appl1
41	1574	70.6	415	14	US-10-242-822B-1	Sequence 1, Appl1
42	1574	70.6	415	15	US-10-649-193-2	Sequence 2, Appl1
43	1574	70.6	415	16	US-10-649-852-2	Sequence 2, Appl1
44	1574	70.6	415	16	US-10-649-852-4	Sequence 4, Appl1
45	1574	70.6	415	16	US-10-450-097-14	Sequence 14, Appl1

ALIGNMENTS

RESULT 1
US-09-881-401-4
; Sequence 4, Application US/09881401
; Patent No. US20020077468A1
; GENERAL INFORMATION:
; APPLICANT: Lovenberg, Timothy W.
; Olensdorf, Tilmann
; Liaw, Chen
; Grigorliadis, Dimitri E.
; Chalmers, Derek T.
; Desouza, Eric B.
; TITLE OF INVENTION: CORTICOTROPIN RELEASING FACTOR 2
; RECEPTORS
; NUMBER OF SEQUENCES: 8
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Seed Intellectual Property Law Group
; STREET: 701 Fifth Avenue, Suite 6300
; CITY: Seattle
; STATE: Washington
; COUNTRY: USA
; ZIP: 98104-7092
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/881,401
; FILING DATE: 13-Jun-2001
; CLASSIFICATION: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: Christiansen, William T.
; REGISTRATION NUMBER: 44,614
; REFERENCE/DOCKET NUMBER: 690068.401C4

TELECOMMUNICATION INFORMATION:
 TELEPHONE: (206) 622-4900
 TELEFAX: (206) 682-6031
 INFORMATION FOR SEQ ID NO: 4:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 411 amino acids
 TYPE: amino acid
 TOPOLOGY: linear
 MOLECULE TYPE: protein
 SEQUENCE DESCRIPTION: SEQ ID NO: 4:
 US-09-881-401-4

Query Match 100.0%; Score 2228; DB 9; Length 411;
 Best Local Similarity 100.0%; Pred. No. 4e-198;
 Matches 411; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MDAALLSLFANCSLALAEELLLDGCEPPDPGPGSYCYNTTLDQIGTCWPOSAPGALV 60
 DB 1 MDAALLSLFANCSLALAEELLLDGCEPPDPGPGSYCYNTTLDQIGTCWPOSAPGALV 60
 QY 61 ERPCPEYNGIKYNTTRNAYRECLNGTWASRINYSCEPILDDKORKYDLHYRIALIIN 120
 DB 61 ERPCPEYNGIKYNTTRNAYRECLNGTWASRINYSCEPILDDKORKYDLHYRIALIIN 120
 QY 121 YLGHCVSVVAALVAAPFLFLVLRISIRCLRNVIHMLITTFILRNITWFLQLIDHEVHGN 180
 DB 121 YLGHCVSVVAALVAAPFLFLVLRISIRCLRNVIHMLITTFILRNITWFLQLIDHEVHGN 180
 QY 181 EVMGRCVTTINFYVNTNFMFVEGCVLHTAIWMTYSTELRKMLFLFIGMCI PCPIIV 240
 DB 181 EVMGRCVTTINFYVNTNFMFVEGCVLHTAIWMTYSTELRKMLFLFIGMCI PCPIIV 240
 QY 241 AMAVGKLYYENECQCFGKEPGLVDYIYQGPILVLLINFLVFNIVAILMTKLRASSTS 300
 DB 241 AMAVGKLYYENECQCFGKEPGLVDYIYQGPILVLLINFLVFNIVAILMTKLRASSTS 300
 QY 301 ETIQYRAVKATLVLLPLGITTYMLFVNPGEDDLSQIVFIYNSFLQSGFGFVSVPYC 360
 DB 301 ETIQYRAVKATLVLLPLGITTYMLFVNPGEDDLSQIVFIYNSFLQSGFGFVSVPYC 360
 QY 361 FPNQSVSALRKRMHMODHALLRPVVARAMSIFTSPTRI SFHSIKQTAAY 411
 DB 361 FPNQSVSALRKRMHMODHALLRPVVARAMSIFTSPTRI SFHSIKQTAAY 411

RESULT 2
 US-09-818-009-12

GENERAL INFORMATION:
 APPLICANT: THE SALK INSTITUTE FOR BIOLOGICAL STUDIES
 TITLE OF INVENTION: UROCORTIN PEPTIDES
 NUMBER OF SEQUENCES: 19
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: FITCH, EVEN, TABIN & FLANNERY
 STREET: 120 S. LaSalle Street, Suite 1600
 CITY: Chicago
 STATE: Illinois
 COUNTRY: USA
 ZIP: 60603
 COMPUTER READABLE FORM:
 MEDIUM TYPE: floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.30
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/09/818,009
 FILING DATE: 26-Mar-2001
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/981,189
 FILING DATE: 10-DEC-1997
 APPLICATION NUMBER: US 60/028,144
 FILING DATE: 13-JUN-1995
 APPLICATION NUMBER: US 60/002,223
 FILING DATE: 11-AUG-1995

ATTORNEY/AGENT INFORMATION:
 NAME: Schumann, James J.
 REGISTRATION NUMBER: 20,856
 REFERENCE/DOCKET NUMBER: 57611
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: 858-552-1311
 TELEFAX: 858-552-0095
 SEQUENCE DESCRIPTION: SEQ ID NO: 12:
 US-09-818-009-12

Query Match 100.0%; Score 2228; DB 10; Length 411;
 Best Local Similarity 100.0%; Pred. No. 4e-198;
 Matches 411; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MDAALLSLFANCSLALAEELLLDGCEPPDPGPGSYCYNTTLDQIGTCWPOSAPGALV 60
 DB 1 MDAALLSLFANCSLALAEELLLDGCEPPDPGPGSYCYNTTLDQIGTCWPOSAPGALV 60
 QY 61 ERPCPEYNGIKYNTTRNAYRECLNGTWASRINYSCEPILDDKORKYDLHYRIALIIN 120
 DB 61 ERPCPEYNGIKYNTTRNAYRECLNGTWASRINYSCEPILDDKORKYDLHYRIALIIN 120
 QY 121 YLGHCVSVVAALVAAPFLFLVLRISIRCLRNVIHMLITTFILRNITWFLQLIDHEVHGN 180
 DB 121 YLGHCVSVVAALVAAPFLFLVLRISIRCLRNVIHMLITTFILRNITWFLQLIDHEVHGN 180
 QY 181 EVMGRCVTTINFYVNTNFMFVEGCVLHTAIWMTYSTELRKMLFLFIGMCI PCPIIV 240
 DB 181 EVMGRCVTTINFYVNTNFMFVEGCVLHTAIWMTYSTELRKMLFLFIGMCI PCPIIV 240
 QY 241 AMAVGKLYYENECQCFGKEPGLVDYIYQGPILVLLINFLVFNIVAILMTKLRASSTS 300
 DB 241 AMAVGKLYYENECQCFGKEPGLVDYIYQGPILVLLINFLVFNIVAILMTKLRASSTS 300
 QY 301 ETIQYRAVKATLVLLPLGITTYMLFVNPGEDDLSQIVFIYNSFLQSGFGFVSVPYC 360
 DB 301 ETIQYRAVKATLVLLPLGITTYMLFVNPGEDDLSQIVFIYNSFLQSGFGFVSVPYC 360
 QY 361 FPNQSVSALRKRMHMODHALLRPVVARAMSIFTSPTRI SFHSIKQTAAY 411
 DB 361 FPNQSVSALRKRMHMODHALLRPVVARAMSIFTSPTRI SFHSIKQTAAY 411

RESULT 3
 US-09-799-978-18

Sequence 18, Application US/09799978
 Publication No. US20030165807A1
 GENERAL INFORMATION:
 APPLICANT: The Procter & Gamble Company
 APPLICANT: Isifort, Robert
 TITLE OF INVENTION: Methods for Identifying Compounds for Regulating Muscle Mass or
 TITLE OF INVENTION: Function Using Corticotropin Releasing Factor Receptors
 FILE REFERENCE: 8448
 CURRENT APPLICATION NUMBER: US/09/799,978
 CURRENT FILING DATE: 2001-03-06
 NUMBER OF SEQ ID NOS: 44
 SOFTWARE: PatentIn version 3.0
 SEQ ID NO 18
 LENGTH: 411
 TYPE: PRT
 ORGANISM: Rattus norvegicus
 US-09-799-978-18

Query Match 100.0%; Score 2228; DB 10; Length 411;
 Best Local Similarity 100.0%; Pred. No. 4e-198;
 Matches 411; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MDAALLSLFANCSLALAEELLLDGCEPPDPGPGSYCYNTTLDQIGTCWPOSAPGALV 60
 DB 1 MDAALLSLFANCSLALAEELLLDGCEPPDPGPGSYCYNTTLDQIGTCWPOSAPGALV 60
 QY 61 ERPCPEYNGIKYNTTRNAYRECLNGTWASRINYSCEPILDDKORKYDLHYRIALIIN 120

Db 61 ERCPPEYFNGIKNTNRNARECLNGTWSRINYSCEPIIDDKORKYDLHRIALIN 120
QY 121 YLGHCVSVALVAAPFLFLVLSIRCLRVNIHNNLITTFILRNITWFLQIDHEVEHGN 180
Db 121 YLGHCVSVALVAAPFLFLVLSIRCLRVNIHNNLITTFILRNITWFLQIDHEVEHGN 180
QY 181 EVMGRCVTTIFNFVVTNFFMFWVEGCGYLHTAIVMTYSTHLRKMLFLFIGWCI PCPIIV 240
Db 181 EVMGRCVTTIFNFVVTNFFMFWVEGCGYLHTAIVMTYSTHLRKMLFLFIGWCI PCPIIV 240
QY 241 AMAVGKLYYENECQWFGKEGDLVDYIYOGPIILVLLINVFLENIVRIIMTLGRASSTS 300
Db 241 AMAVGKLYYENECQWFGKEGDLVDYIYOGPIILVLLINVFLENIVRIIMTLGRASSTS 300
QY 301 ETIQYKAKAVATLVLLPLIGITVLMFFVNPGEDDLSQIVFIYNSFLOSQGFVSVPYC 360
Db 301 ETIQYKAKAVATLVLLPLIGITVLMFFVNPGEDDLSQIVFIYNSFLOSQGFVSVPYC 360
QY 361 FNGEVSALRKRMHMODHMLRVVARAMSIPSPTRISPSIKOTAAV 411
Db 361 FNGEVSALRKRMHMODHMLRVVARAMSIPSPTRISPSIKOTAAV 411

RESULT 4
US-10-649-852-18
; Sequence 18, Application US/10649852
; Publication No. US20040101911A1
; GENERAL INFORMATION:
; APPLICANT: The Procter & Gamble Company
; APPLICANT: Isfort, Robert
; APPLICANT: Sheldon, Russell
; TITLE OF INVENTION: Methods for Identifying Compounds for Regulating Muscle Mass or F
; FILE REFERENCE: 8448R
; CURRENT APPLICATION NUMBER: US/10/649,852
; CURRENT FILING DATE: 2003-08-27
; PRIOR APPLICATION NUMBER: US 09/799,978
; PRIOR FILING DATE: 2001-03-06
; NUMBER OF SEQ ID NOS: 44
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 18
; LENGTH: 411
; TYPE: PRT
; ORGANISM: Rattus norvegicus
US-10-649-852-18

Query Match 100.0%; Score 2228; DB 16; Length 411;
Best Local Similarity 100.0%; Pred. No. 4e-198;
Matches 411; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MDALLLSLEANCSTALAEELLDDGMBPDPBEGPYSCNTTLDIGTCWPOSAGALV 60
Db 1 MDALLLSLEANCSTALAEELLDDGMBPDPBEGPYSCNTTLDIGTCWPOSAGALV 60
QY 61 ERCPPEYFNGIKNTNRNARECLNGTWSRINYSCEPIIDDKORKYDLHRIALIN 120
Db 61 ERCPPEYFNGIKNTNRNARECLNGTWSRINYSCEPIIDDKORKYDLHRIALIN 120
QY 121 YLGHCVSVALVAAPFLFLVLSIRCLRVNIHNNLITTFILRNITWFLQIDHEVEHGN 180
Db 121 YLGHCVSVALVAAPFLFLVLSIRCLRVNIHNNLITTFILRNITWFLQIDHEVEHGN 180
QY 181 EVMGRCVTTIFNFVVTNFFMFWVEGCGYLHTAIVMTYSTHLRKMLFLFIGWCI PCPIIV 240
Db 181 EVMGRCVTTIFNFVVTNFFMFWVEGCGYLHTAIVMTYSTHLRKMLFLFIGWCI PCPIIV 240
QY 241 AMAVGKLYYENECQWFGKEGDLVDYIYOGPIILVLLINVFLENIVRIIMTLGRASSTS 300
Db 241 AMAVGKLYYENECQWFGKEGDLVDYIYOGPIILVLLINVFLENIVRIIMTLGRASSTS 300
QY 301 ETIQYKAKAVATLVLLPLIGITVLMFFVNPGEDDLSQIVFIYNSFLOSQGFVSVPYC 360
Db 301 ETIQYKAKAVATLVLLPLIGITVLMFFVNPGEDDLSQIVFIYNSFLOSQGFVSVPYC 360

Db 301 ETIQYKAKAVATLVLLPLIGITVLMFFVNPGEDDLSQIVFIYNSFLOSQGFVSVPYC 360
QY 361 FNGEVSALRKRMHMODHMLRVVARAMSIPSPTRISPSIKOTAAV 411
Db 361 FNGEVSALRKRMHMODHMLRVVARAMSIPSPTRISPSIKOTAAV 411

RESULT 5
US-10-821-502-4
; Sequence 4, Application US/10821502
; Publication No. US2004018553A1
; GENERAL INFORMATION:
; APPLICANT: Lovenberg, Timothy W.
; Oltersdorf, Tilman
; Liaw, Chen Wang
; Grigoriadis, Dimitri E.
; Chalmers, Derek T.
; Desouza, Errol B.
; TITLE OF INVENTION: CORTICOTROPIN RELEASING FACTOR 2
; RECEPTORS
; NUMBER OF SEQUENCES: 8
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Seed Intellectual Property Law Group
; STREET: 701 Fifth Avenue, Suite 6300
; CITY: Seattle
; STATE: Washington
; COUNTRY: USA
; ZIP: 98104-7092
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/821,502
; FILING DATE: 09-Apr-2004
; CLASSIFICATION: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: Christiansen, William T.
; REGISTRATION NUMBER: 44,614
; REFERENCE/DOCKET NUMBER: 690068.401C5
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (206) 622-4900
; TELEFAX: (206) 682-6031
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 411 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-10-821-502-4

Query Match 100.0%; Score 2228; DB 16; Length 411;
Best Local Similarity 100.0%; Pred. No. 4e-198;
Matches 411; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MDALLLSLEANCSTALAEELLDDGMBPDPBEGPYSCNTTLDIGTCWPOSAGALV 60
Db 1 MDALLLSLEANCSTALAEELLDDGMBPDPBEGPYSCNTTLDIGTCWPOSAGALV 60
QY 61 ERCPPEYFNGIKNTNRNARECLNGTWSRINYSCEPIIDDKORKYDLHRIALIN 120
Db 61 ERCPPEYFNGIKNTNRNARECLNGTWSRINYSCEPIIDDKORKYDLHRIALIN 120
QY 121 YLGHCVSVALVAAPFLFLVLSIRCLRVNIHNNLITTFILRNITWFLQIDHEVEHGN 180
Db 121 YLGHCVSVALVAAPFLFLVLSIRCLRVNIHNNLITTFILRNITWFLQIDHEVEHGN 180
QY 181 EVMGRCVTTIFNFVVTNFFMFWVEGCGYLHTAIVMTYSTHLRKMLFLFIGWCI PCPIIV 240
Db 181 EVMGRCVTTIFNFVVTNFFMFWVEGCGYLHTAIVMTYSTHLRKMLFLFIGWCI PCPIIV 240
QY 241 AMAVGKLYYENECQWFGKEGDLVDYIYOGPIILVLLINVFLENIVRIIMTLGRASSTS 300
Db 241 AMAVGKLYYENECQWFGKEGDLVDYIYOGPIILVLLINVFLENIVRIIMTLGRASSTS 300
QY 301 ETIQYKAKAVATLVLLPLIGITVLMFFVNPGEDDLSQIVFIYNSFLOSQGFVSVPYC 360
Db 301 ETIQYKAKAVATLVLLPLIGITVLMFFVNPGEDDLSQIVFIYNSFLOSQGFVSVPYC 360

QY 241 AMAVGKLYEENQCFGKEPGDLVDYIYQGPILVLLINFPVFLNIVILMTKLRASSTTS 300
DB 241 AMAVGKLYEENQCFGKEPGDLVDYIYQGPILVLLINFPVFLNIVILMTKLRASSTTS 300
QY 301 ETIQYRKAVKATLVLLPLIGITVYMLFVNPGEDDLSQIVFIYNSFLQSFQGFVSVFYC 360
DB 301 ETIQYRKAVKATLVLLPLIGITVYMLFVNPGEDDLSQIVFIYNSFLQSFQGFVSVFYC 360
QY 361 PFNGEVSRLAKRKHWRMODHHLRVVVARAMSIPSPTRISFHSIKQTAAY 411
DB 361 PFNGEVSRLAKRKHWRMODHHLRVVVARAMSIPSPTRISFHSIKQTAAY 411

RESULT 6
US-10-292-798-636
; Sequence 636, Application US/10292798
; Publication No. US20030235833A1
; GENERAL INFORMATION:
; APPLICANT: SUWA, MAKIKO
; APPLICANT: ASAI, KIYOSHI
; APPLICANT: AKIYAMA, YUTAKA
; APPLICANT: ABURATANI, HIROYUKI
; TITLE OF INVENTION: GUANOSINE TRIPHOSPHATE-BINDING PROTEIN COUPLED RECEPTORS
; FILE REFERENCE: 084335/166
; CURRENT APPLICATION NUMBER: US/10/292,798
; CURRENT FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: 10/017,161
; PRIOR FILING DATE: 2001-12-18
; PRIOR APPLICATION NUMBER: JP 2001-246789
; PRIOR FILING DATE: 2001-06-18
; NUMBER OF SEQ ID NOS: 2070
; SOFTWARE: Patentin Ver. 2.1
; SEQ ID NO: 636
; LENGTH: 411
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-292-798-636

Query Match 94.7%; Score 2111; DB 15; Length 411;
Best Local Similarity 93.9%; Pred. No. 2.9e-187;
Matches 386; Conservative 13; Mismatches 12; Indels 0; Gaps 0;
QY 1 MDALLLSLEANGSLAAEELLIDGKGPDPPEGPYSYCTTLDQIGTCWPSAAGALV 60
DB 1 MDALLLSLEANGSLAAEELLIDGKGPDPPEGPYSYCTTLDQIGTCWPSAAGALV 60
QY 61 ERPCPEYFNGIKYNTTRNAVRECLENGTMASRINYSHCEPILDDKORKYDLHYRIALVIN 120
DB 61 ERPCPEYFNGIKYNTTRNAVRECLENGTMASRINYSHCEPILDDKORKYDLHYRIALVIN 120
QY 121 YLGHCVSVAALVAALFLFLVLSIRCLRNVIHMNLITTFILRNITWFLQLIDHEVHSGN 180
DB 121 YLGHCVSVAALVAALFLFLVLSIRCLRNVIHMNLITTFILRNITWFLQLIDHEVHSGN 180
QY 121 YLGHCVSVAALVAALFLFLVLSIRCLRNVIHMNLITTFILRNITWFLQLIDHEVHSGN 180
DB 121 YLGHCVSVAALVAALFLFLVLSIRCLRNVIHMNLITTFILRNITWFLQLIDHEVHSGN 180
QY 181 EYWCRCVTTINYPVVTNPFMMFVEGCIYHTAIWVTYSTELRKMLFLFIQWCIPIPIIV 240
DB 181 EYWCRCVTTINYPVVTNPFMMFVEGCIYHTAIWVTYSTELRKMLFLFIQWCIPIPIIV 240
QY 181 EYWCRCVTTINYPVVTNPFMMFVEGCIYHTAIWVTYSTELRKMLFLFIQWCIPIPIIV 240
DB 181 EYWCRCVTTINYPVVTNPFMMFVEGCIYHTAIWVTYSTELRKMLFLFIQWCIPIPIIV 240
QY 241 AMAVGKLYEENQCFGKEPGDLVDYIYQGPILVLLINFPVFLNIVILMTKLRASSTTS 300
DB 241 AMAVGKLYEENQCFGKEPGDLVDYIYQGPILVLLINFPVFLNIVILMTKLRASSTTS 300
QY 301 ETIQYRKAVKATLVLLPLIGITVYMLFVNPGEDDLSQIVFIYNSFLQSFQGFVSVFYC 360
DB 301 ETIQYRKAVKATLVLLPLIGITVYMLFVNPGEDDLSQIVFIYNSFLQSFQGFVSVFYC 360
QY 361 PFNGEVSRLAKRKHWRMODHHLRVVVARAMSIPSPTRISFHSIKQTAAY 411
DB 361 PFNGEVSRLAKRKHWRMODHHLRVVVARAMSIPSPTRISFHSIKQTAAY 411

RESULT 7
US-09-881-401-8

; Sequence 8, Application US/09981401
; Patent No. US20020077468A1
; GENERAL INFORMATION:
; APPLICANT: Lovenberg, Timothy W.
; Oltersdorf, Tilman
; Liaw, Chen
; Grigoriadis, Dimitri E.
; Chalmers, Derek T.
; Desouza, Errol B.
; TITLE OF INVENTION: CORTICOTROPIN RELEASING FACTOR 2 RECEPTORS
; NUMBER OF SEQUENCES: 8
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Seed Intellectual Property Law Group
; STREET: 701 Fifth Avenue, Suite 6300
; CITY: Seattle
; STATE: Washington
; COUNTRY: USA
; ZIP: 98104-7092

COMPUTER READABLE FORM:
; MEDIUM TYPE: floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/881,401
; FILING DATE: 13-Jun-2001
; CLASSIFICATION: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: Christensen, William T.
; REGISTRATION NUMBER: 44,614
; REFERENCE/DOCKET NUMBER: 690068.401C4
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (206) 622-4900
; TELEFAX: (206) 682-6031
; INFORMATION FOR SEQ ID NO: 8:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 411 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; SEQUENCE DESCRIPTION: SEQ ID NO: 8:
US-09-881-401-8

Query Match 94.5%; Score 2106; DB 9; Length 411;
Best Local Similarity 93.7%; Pred. No. 8.6e-187;
Matches 385; Conservative 13; Mismatches 13; Indels 0; Gaps 0;
QY 1 MDALLLSLEANGSLAAEELLIDGKGPDPPEGPYSYCTTLDQIGTCWPSAAGALV 60
DB 1 MDALLLSLEANGSLAAEELLIDGKGPDPPEGPYSYCTTLDQIGTCWPSAAGALV 60
QY 61 ERPCPEYFNGIKYNTTRNAVRECLENGTMASRINYSHCEPILDDKORKYDLHYRIALVIN 120
DB 61 ERPCPEYFNGIKYNTTRNAVRECLENGTMASRINYSHCEPILDDKORKYDLHYRIALVIN 120
QY 121 YLGHCVSVAALVAALFLFLVLSIRCLRNVIHMNLITTFILRNITWFLQLIDHEVHSGN 180
DB 121 YLGHCVSVAALVAALFLFLVLSIRCLRNVIHMNLITTFILRNITWFLQLIDHEVHSGN 180
QY 121 YLGHCVSVAALVAALFLFLVLSIRCLRNVIHMNLITTFILRNITWFLQLIDHEVHSGN 180
DB 121 YLGHCVSVAALVAALFLFLVLSIRCLRNVIHMNLITTFILRNITWFLQLIDHEVHSGN 180
QY 181 EYWCRCVTTINYPVVTNPFMMFVEGCIYHTAIWVTYSTELRKMLFLFIQWCIPIPIIV 240
DB 181 EYWCRCVTTINYPVVTNPFMMFVEGCIYHTAIWVTYSTELRKMLFLFIQWCIPIPIIV 240
QY 181 EYWCRCVTTINYPVVTNPFMMFVEGCIYHTAIWVTYSTELRKMLFLFIQWCIPIPIIV 240
DB 181 EYWCRCVTTINYPVVTNPFMMFVEGCIYHTAIWVTYSTELRKMLFLFIQWCIPIPIIV 240
QY 241 AMAVGKLYEENQCFGKEPGDLVDYIYQGPILVLLINFPVFLNIVILMTKLRASSTTS 300
DB 241 AMAVGKLYEENQCFGKEPGDLVDYIYQGPILVLLINFPVFLNIVILMTKLRASSTTS 300
QY 301 ETIQYRKAVKATLVLLPLIGITVYMLFVNPGEDDLSQIVFIYNSFLQSFQGFVSVFYC 360
DB 301 ETIQYRKAVKATLVLLPLIGITVYMLFVNPGEDDLSQIVFIYNSFLQSFQGFVSVFYC 360
QY 361 PFNGEVSRLAKRKHWRMODHHLRVVVARAMSIPSPTRISFHSIKQTAAY 411
DB 361 PFNGEVSRLAKRKHWRMODHHLRVVVARAMSIPSPTRISFHSIKQTAAY 411

Db 361 FNGEVSARVRRKMRHQDHSLRVPMARAMSIPSPTRISFSHSIKQTAAY 411

RESULT 8

US-09-799-978-10
; Sequence 10, Application US/09799978
; Publication No. US20030165807A1
; GENERAL INFORMATION:
; APPLICANT: The-Procter & Gamble Company
; APPLICANT: Isfort, Robert
; APPLICANT: Sheldon, Russell
; TITLE OF INVENTION: Methods for Identifying Compounds for Regulating Muscle Mass or
; TITLE OF INVENTION: Function Using Corticotropin Releasing Factor Receptors
; FILE REFERENCE: 8448
; CURRENT APPLICATION NUMBER: US/09/799,978
; CURRENT FILING DATE: 2001-03-06
; NUMBER OF SEQ ID NOS: 44
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 10
; LENGTH: 411
; TYPE: PRF
; ORGANISM: Homo sapiens
US-09-799-978-10

Query Match 94.5%; Score 2106; DB 10; Length 411;
Best Local Similarity 93.7%; Pred. No. 8,6e-187;
Matches 385; Conservative 13; Mismatches 13; Indels 0; Gaps 0;

QY 1 MDALLSLLEANCGLALAEELLDDGMBPPDEPGYSYCNNTLDDIGTCWPSAGALV 60
DB 1 MDALLSLLEANCGLALAEELLDDGMBPPDEPGYSYCNNTLDDIGTCWPSAGALV 60
QY 61 ERPCPEYFNGIKYNTTRNAVRECLNGTWASRINYSHCPEPLDDKORKYDLHYRIALIN 120
DB 61 ERPCPEYFNGIKYNTTRNAVRECLNGTWASRINYSHCPEPLDDKORKYDLHYRIALIN 120
QY 121 YLGHCVSVALVAALFLPLFLVLSIRCLRVNIHNNLITTFILRNITWFLQLIDHEVHEGN 180
DB 121 YLGHCVSVALVAALFLPLFLVLSIRCLRVNIHNNLITTFILRNITWFLQLIDHEVHEGN 180
QY 181 EWCRCVTTTFNYFVVTNFFMFWEGCYLHTAIWMTYSTHLRKMLFLFIGWCIPPIIV 240
DB 181 EWCRCVTTTFNYFVVTNFFMFWEGCYLHTAIWMTYSTHLRKMLFLFIGWCIPPIIV 240
QY 241 ANAVGLYYENQCMFGKPEGLVDYIYOGPIILVLLINFPVLFNIVRIIMTKLASTS 300
DB 241 ANAVGLYYENQCMFGKPEGLVDYIYOGPIILVLLINFPVLFNIVRIIMTKLASTS 300
QY 301 ETIOYKAVKATLVLLPLIGITYMLFVNPGEDDLSQIVFIYFNSFLOSFOGFFVSVFYC 360
DB 301 ETIOYKAVKATLVLLPLIGITYMLFVNPGEDDLSQIVFIYFNSFLOSFOGFFVSVFYC 360
QY 361 FNGEVSARVRRKMRHQDHSLRVPMARAMSIPSPTRISFSHSIKQTAAY 411
DB 361 FNGEVSARVRRKMRHQDHSLRVPMARAMSIPSPTRISFSHSIKQTAAY 411

RESULT 9

US-10-225-567A-96
; Sequence 96, Application US/10225567A
; Publication No. US20030113798A1
; GENERAL INFORMATION:
; APPLICANT: Lifespan Biosciences
; APPLICANT: Brown, Joseph P.
; APPLICANT: Burner, Glenna C.
; APPLICANT: Roush, Christine L.
; TITLE OF INVENTION: ANTIGENIC PEPTIDES AND ANTIBODIES FOR G PROTEIN-COUPLED RECEPTORS
; FILE REFERENCE: 1920-4-4
; CURRENT APPLICATION NUMBER: US/10/225,567A
; CURRENT FILING DATE: 2001-12-19
; PRIOR APPLICATION NUMBER: 60/257,144
; PRIOR FILING DATE: 2000-12-19

; NUMBER OF SEQ ID NOS: 2292
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 96
; LENGTH: 411
; TYPE: PRF
; ORGANISM: Homo sapiens
US-10-225-567A-96

Query Match 94.5%; Score 2106; DB 14; Length 411;
Best Local Similarity 93.7%; Pred. No. 8,6e-187;
Matches 385; Conservative 13; Mismatches 13; Indels 0; Gaps 0;

QY 1 MDALLSLLEANCGLALAEELLDDGMBPPDEPGYSYCNNTLDDIGTCWPSAGALV 60
DB 1 MDALLSLLEANCGLALAEELLDDGMBPPDEPGYSYCNNTLDDIGTCWPSAGALV 60
QY 61 ERPCPEYFNGIKYNTTRNAVRECLNGTWASRINYSHCPEPLDDKORKYDLHYRIALIN 120
DB 61 ERPCPEYFNGIKYNTTRNAVRECLNGTWASRINYSHCPEPLDDKORKYDLHYRIALIN 120
QY 121 YLGHCVSVALVAALFLPLFLVLSIRCLRVNIHNNLITTFILRNITWFLQLIDHEVHEGN 180
DB 121 YLGHCVSVALVAALFLPLFLVLSIRCLRVNIHNNLITTFILRNITWFLQLIDHEVHEGN 180
QY 181 EWCRCVTTTFNYFVVTNFFMFWEGCYLHTAIWMTYSTHLRKMLFLFIGWCIPPIIV 240
DB 181 EWCRCVTTTFNYFVVTNFFMFWEGCYLHTAIWMTYSTHLRKMLFLFIGWCIPPIIV 240
QY 241 ANAVGLYYENQCMFGKPEGLVDYIYOGPIILVLLINFPVLFNIVRIIMTKLASTS 300
DB 241 ANAVGLYYENQCMFGKPEGLVDYIYOGPIILVLLINFPVLFNIVRIIMTKLASTS 300
QY 301 ETIOYKAVKATLVLLPLIGITYMLFVNPGEDDLSQIVFIYFNSFLOSFOGFFVSVFYC 360
DB 301 ETIOYKAVKATLVLLPLIGITYMLFVNPGEDDLSQIVFIYFNSFLOSFOGFFVSVFYC 360
QY 361 FNGEVSARVRRKMRHQDHSLRVPMARAMSIPSPTRISFSHSIKQTAAY 411
DB 361 FNGEVSARVRRKMRHQDHSLRVPMARAMSIPSPTRISFSHSIKQTAAY 411

RESULT 10

US-10-649-852-10
; Sequence 10, Application US/10649852
; Publication No. US2004010191A1
; GENERAL INFORMATION:
; APPLICANT: The Procter & Gamble Company
; APPLICANT: Isfort, Robert
; APPLICANT: Sheldon, Russell
; TITLE OF INVENTION: Methods for Identifying Compounds for Regulating Muscle Mass or
; TITLE OF INVENTION: Using Corticotropin Releasing Factor Receptors
; FILE REFERENCE: 8448R
; CURRENT APPLICATION NUMBER: US/10/649,852
; CURRENT FILING DATE: 2003-08-27
; PRIOR APPLICATION NUMBER: US 09/799,978
; PRIOR FILING DATE: 2001-03-06
; NUMBER OF SEQ ID NOS: 44
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 10
; LENGTH: 411
; TYPE: PRF
; ORGANISM: Homo sapiens
US-10-649-852-10

Query Match 94.5%; Score 2106; DB 16; Length 411;
Best Local Similarity 93.7%; Pred. No. 8,6e-187;
Matches 385; Conservative 13; Mismatches 13; Indels 0; Gaps 0;

QY 1 MDALLSLLEANCGLALAEELLDDGMBPPDEPGYSYCNNTLDDIGTCWPSAGALV 60
DB 1 MDALLSLLEANCGLALAEELLDDGMBPPDEPGYSYCNNTLDDIGTCWPSAGALV 60
QY 61 ERPCPEYFNGIKYNTTRNAVRECLNGTWASRINYSHCPEPLDDKORKYDLHYRIALIN 120

Db 61 ERPCPEYENGKYNTRNAARECELENGTWSKINSOCEPLDDKORKYDHLHYALVNV 120
Qy 121 YLGHCVSVALVAAPFLFLVLSIRCLRNVIHNNLITTFILRNITWFLQJLIDHEVHEGN 180
Db 121 YLGHCVSVALVAAPFLFLVLSIRCLRNVIHNNLITTFILRNITWFLQJLIDHEVHEGN 180
Qy 181 EVMCRCTTTFNFFVVTNFFMFWEGCYLHTAIVMTYSTELHRKMLFLFGWCIPCPITV 240
Db 181 EVMCHCTITTFNFFVVTNFFMFWEGCYLHTAIVMTYSTELHRKMLFLFGWCIPCPITV 240
Qy 241 AMAVGKLYYENQOCWPKGEPDLDVYIOGPIILVLLINFPFLFNIVRIIMTKLRASSTS 300
Db 241 AMAVGKLYYENQOCWPKGEPDLDVYIOGPIILVLLINFPFLFNIVRIIMTKLRASSTS 300
Qy 301 ETIOYRAVKATVLLPLGLITTYMLFVNPGEDDLSQIVFIYNSFLOSFOGFFVSFYC 360
Db 301 ETIOYRAVKATVLLPLGLITTYMLFVNPGEDDLSQIMFIYNSFLOSFOGFFVSFYC 360
Qy 361 FPNGEVSALRKRRHMODHHLRVVAVARMSIPTSPTRISFHSIKOTAAV 411
Db 361 FPNGEVSALRKRRHMODHHLRVVAVARMSIPTSPTRISFHSIKOTAAV 411

RESULT 11
US-10-821-502-8
Sequence 8, Application US/10821502
Publication No. US2004018553A1
GENERAL INFORMATION:

APPLICANT: Lovenberg, Timothy W.
Oltersdorf, Tilman
Llao, Chen Wang
Grigoradiis, Dimitri E.
Chalmers, Derek T.
Desouza, Errol B.
TITLE OF INVENTION: CORTICOTROPIN RELEASING FACTOR 2 RECEPTORS
NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
ADDRESSEE: Seed Intellectual Property Law Group
STREET: 701 Fifth Avenue, Suite 6300
CITY: Seattle
STATE: Washington
COUNTRY: USA
ZIP: 98104-7092
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/821,502
FILING DATE: 09-Apr-2004
CLASSIFICATION: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Christiansen, William T.
REGISTRATION NUMBER: 44,614
REFERENCE/DOCKET NUMBER: 690068, 401C5
TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 622-4900
TELEFAX: (206) 682-6031
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 411 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 8:
US-10-821-502-8

Query Match 94.5%; Score 2106; DB 16; Length 411;
Best Local Similarity 93.7%; Pred. No. 8,6e-187;
Matches 385; Conservative 13; Mismatches 13; Indels 0; Gaps 0;

Qy 1 MDALLLSLEANCSLALAEELLIDGNGEPPDPGYSYCNLTLLDQIGTCWPGSAPALV 60
Db 1 MDALLLSLEANCSLALAEELLIDGNGEPPDPGYSYCNLTLLDQIGTCWPGSAPALV 60
Qy 61 ERPCPEYENGKYNTRNAARECELENGTWSKINSOCEPLDDKORKYDHLHYALVNV 120
Db 61 ERPCPEYENGKYNTRNAARECELENGTWSKINSOCEPLDDKORKYDHLHYALVNV 120
Qy 121 YLGHCVSVALVAAPFLFLVLSIRCLRNVIHNNLITTFILRNITWFLQJLIDHEVHEGN 180
Db 121 YLGHCVSVALVAAPFLFLVLSIRCLRNVIHNNLITTFILRNITWFLQJLIDHEVHEGN 180
Qy 181 EVMCRCTTTFNFFVVTNFFMFWEGCYLHTAIVMTYSTELHRKMLFLFGWCIPCPITV 240
Db 181 EVMCHCTITTFNFFVVTNFFMFWEGCYLHTAIVMTYSTELHRKMLFLFGWCIPCPITV 240
Qy 241 AMAVGKLYYENQOCWPKGEPDLDVYIOGPIILVLLINFPFLFNIVRIIMTKLRASSTS 300
Db 241 AMAVGKLYYENQOCWPKGEPDLDVYIOGPIILVLLINFPFLFNIVRIIMTKLRASSTS 300
Qy 301 ETIOYRAVKATVLLPLGLITTYMLFVNPGEDDLSQIVFIYNSFLOSFOGFFVSFYC 360
Db 301 ETIOYRAVKATVLLPLGLITTYMLFVNPGEDDLSQIMFIYNSFLOSFOGFFVSFYC 360
Qy 361 FPNGEVSALRKRRHMODHHLRVVAVARMSIPTSPTRISFHSIKOTAAV 411
Db 361 FPNGEVSALRKRRHMODHHLRVVAVARMSIPTSPTRISFHSIKOTAAV 411

RESULT 12
US-10-757-262-120
Sequence 120, Application US/10757262
Publication No. US20040197825A1
GENERAL INFORMATION:

APPLICANT: Karichevi, Venkateswarlu
Slios-Santiago, Immaculada
APPLICANT: Eliaso, Scott D.
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR TREATING
TITLE OF INVENTION: UROLOGICAL DISORDERS USING 44390, 54181, 211, 5687, 884,
TITLE OF INVENTION: 1405, 636, 4421, 5410, 30905, 2045, 16405, 18560, 2047,
TITLE OF INVENTION: 33751, 52672, 14063, 20739, 32544, 43239, 44373, 51164,
TITLE OF INVENTION: 53010, 16852, 1587, 2207, 22245, 2387, 52908, 69112, 14990,
TITLE OF INVENTION: 18547, 115, 579, 15985, 15625, 760, 18603, 2395, 2554, 8675,
TITLE OF INVENTION: 32720, 4809, 14303, 16816, 17827, 32620, 577, 619, 1423,
TITLE OF INVENTION: 2158, 8263, 15402, 16209, 16386, 2165, 30911, 41897, 1643,
TITLE OF INVENTION: 2543, 9626, 13231, 32409, 84260, 2882, 8203, 32678 OR
FILE REFERENCE: MP103-007P1RNONIM
CURRENT APPLICATION NUMBER: US/10/757, 262
CURRENT FILING DATE: 2004-01-14
PRIOR APPLICATION NUMBER: US 60/440,318
PRIOR FILING DATE: 2003-01-15
PRIOR APPLICATION NUMBER: US 60/444,783
PRIOR FILING DATE: 2003-02-04
PRIOR APPLICATION NUMBER: US 60/457,901
PRIOR FILING DATE: 2003-03-27
PRIOR APPLICATION NUMBER: US 60/468,775
PRIOR FILING DATE: 2003-05-08
PRIOR APPLICATION NUMBER: US 60/471,614
PRIOR FILING DATE: 2003-05-19
PRIOR APPLICATION NUMBER: US 60/478,742
PRIOR FILING DATE: 2003-06-16
PRIOR APPLICATION NUMBER: US 60/488,529
PRIOR FILING DATE: 2003-07-18
PRIOR APPLICATION NUMBER: US 60/491,156
PRIOR FILING DATE: 2003-07-30
PRIOR APPLICATION NUMBER: US 60/499,594
PRIOR FILING DATE: 2003-09-02
PRIOR APPLICATION NUMBER: US 60/506,332
PRIOR FILING DATE: 2003-09-26
NUMBER OF SEQ ID NOS: 136
SOFTWARE: FastSeq for Windows Version 4.0

SEQ ID NO 120
LENGTH: 411
TYPE: PRT
ORGANISM: Homo sapiens
US-10-757-262-120

Query Match 94.5%; Score 2106; DB 16; Length 411;
Best Local Similarity 93.7%; Pred. No. 8.6e-187;
Matches 385; Conservative 13; Mismatches 13; Indels 0; Gaps 0;

QY 1 MDAALLSLLEANCSLAEELLDDGGMBPDEGPGYSYCNLTLDIGTCWPSAGALV 60
DB 1 MDAALHSLLEANCSLAEELLDDGGMBPDEGPGYSYCNLTLDIGTCWPSAGALV 60
QY 61 ERPCPEYFNGIKYNTRNAVRECLNGTWSARINYSCEPIIDDKOKKYDLHYRIALIN 120
DB 61 ERPCPEYFNGIKYNTRNAVRECLNGTWSARINYSCEPIIDDKOKKYDLHYRIALIN 120
QY 121 YLGHCVSVAAFLFLVLSIRCLRVNIHWNLTITFLRNITWFLQLIDHEVHEGN 180
DB 121 YLGHCVSVAAFLFLVLSIRCLRVNIHWNLTITFLRNITWFLQLIDHEVHEGN 180
QY 181 EVMGCVTTIFNYFVNTNFFMMFVEGCVLHTAIWMTYSTELRKMLFLIGMCIPPIIV 240
DB 181 EVMGCVTTIFNYFVNTNFFMMFVEGCVLHTAIWMTYSTELRKMLFLIGMCIPPIIV 240
QY 241 AWAAGKLYENECQWFGKPGDLVDYIYOGPIILVLLINFLFNIRIIMTKLRASSTS 300
DB 241 AWAAGKLYENECQWFGKPGDLVDYIYOGPIILVLLINFLFNIRIIMTKLRASSTS 300
QY 301 ETIYRKAVKATLVLLPLLGITVLMLEFVNPGEDDLSQIVFIYNSFLQSGFVSVFC 360
DB 301 ETIYRKAVKATLVLLPLLGITVLMLEFVNPGEDDLSQIVFIYNSFLQSGFVSVFC 360
QY 361 FENGVRSLARKRMWODHHLRVPARAMSTPSPTIRISFSIKOTAAV 411
DB 361 FENGVRSLARKRMWODHHLRVPARAMSTPSPTIRISFSIKOTAAV 411

RESULT 13

US-09-881-401-2
Sequence 2, Application US/09881401
Patent No. US20020077468A1

GENERAL INFORMATION:

APPLICANT: Lovenberg, Timothy W.

Olestadorf, Tilman

Lisaw, Chen

Grigoriadis, Dimitri E.

Chalmers, Derek T.

Desouza, Erol B.

TITLE OF INVENTION: CORTICOTROPIN RELEASING FACTOR 2 RECEPTORS

NUMBER OF SEQUENCES: 8

CORRESPONDENCE ADDRESS:

ADDRESSER: Seed Intellectual Property Law Group

STREET: 701 Fifth Avenue, Suite 6300

CITY: Seattle

STATE: Washington

COUNTRY: USA

ZIP: 98104-7092

COMPUTER READABLE FORM:

MEDIUM TYPE: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/881,401

FILING DATE: 13-Jun-2001

CLASSIFICATION: <Unknown>

ATTORNEY/AGENT INFORMATION:

NAME: Christensen, William T.

REGISTRATION NUMBER: 44,614

REFERENCE/DOCKET NUMBER: 690068.401C4

TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 622-4900
TELEFAX: (206) 682-6031
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 2:

US-09-881-401-2

Query Match 92.3%; Score 2055.5; DB 9; Length 431;
Best Local Similarity 94.1%; Pred. No. 4.5e-182;
Matches 382; Conservative 1; Mismatches 12; Indels 11; Gaps 1;

QY 6 LLSLEANCSLAEELLDDGGMBPDEGPGYSYCNLTLDIGTCWPSAGALVRRPC 65
DB 37 LMTLEQYCHRTTRNF-----SGPYSCNTTLDIGTCWPSAGALVRRPC 85
QY 66 EYENGIXYNTRNAVRECLNGTWSARINYSCEPIIDDKOKKYDLHYRIALINYLGH 125
DB 66 EYENGIXYNTRNAVRECLNGTWSARINYSCEPIIDDKOKKYDLHYRIALINYLGH 145
QY 126 VSVVALVAAFLFLVLSIRCLRVNIHWNLTITFLRNITWFLQLIDHEVHEGNWCR 185
DB 146 VSVVALVAAFLFLVLSIRCLRVNIHWNLTITFLRNITWFLQLIDHEVHEGNWCR 205
QY 186 CVTTIFNYFVNTNFFMMFVEGCVLHTAIWMTYSTELRKMLFLIGMCIPPIIVAMV 245
DB 206 CVTTIFNYFVNTNFFMMFVEGCVLHTAIWMTYSTELRKMLFLIGMCIPPIIVAMV 265
QY 246 KLYENECQWFGKPGDLVDYIYOGPIILVLLINFLFNIRIIMTKLRASSTSIOY 305
DB 266 KLYENECQWFGKPGDLVDYIYOGPIILVLLINFLFNIRIIMTKLRASSTSIOY 325
QY 306 RAVKATLVLLPLLGITVLMLEFVNPGEDDLSQIVFIYNSFLQSGFVSVFCFNG 365
DB 326 RAVKATLVLLPLLGITVLMLEFVNPGEDDLSQIVFIYNSFLQSGFVSVFCFNG 385
QY 366 VRSALRKRMWODHHLRVPARAMSTPSPTIRISFSIKOTAAV 411
DB 386 VRSALRKRMWODHHLRVPARAMSTPSPTIRISFSIKOTAAV 431

RESULT 14

US-09-818-009-13

GENERAL INFORMATION:

APPLICANT: THE SALK INSTITUTE FOR BIOLOGICAL STUDIES

TITLE OF INVENTION: UROCORTIN PEPTIDES

NUMBER OF SEQUENCES: 19

CORRESPONDENCE ADDRESS:

ADDRESSER: FITCH, EVAN, TABIN & FLANNERY

STREET: 120 S. LaSalle Street, Suite 1600

CITY: Chicago

STATE: Illinois

COUNTRY: USA

ZIP: 60603

COMPUTER READABLE FORM:

MEDIUM TYPE: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/818,009

FILING DATE: 26-Mar-2001

APPLICATION NUMBER: US 08/981,189

FILING DATE: 10-DEC-1997

APPLICATION NUMBER: US 60/028,144

FILING DATE: 13-JUN-1995

APPLICATION NUMBER: US 60/002,223

FILING DATE: 11-AUG-1995

GenCore version 5.1.6
Copyright (c) 1993 - 2005 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: October 3, 2005, 07:52:54 ; Search time 28 Seconds
(without alignments)
1095.742 Million cell updates/sec

Title: US-10-821-502-4

Perfect score: 2228 1 MDALLSLILEANCSIALAE.....SIFPTFRISFHSIKOTAAV 411

Sequence: 1 MDALLSLILEANCSIALAE.....SIFPTFRISFHSIKOTAAV 411

Scoring table: BLOSUM62

Searched: 513545 seqs, 74649064 residues

Total number of hits satisfying chosen parameters: 513545

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-Processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

Issued Patents AA:*

- 1: /cgn2_6/prodata/1/iaa/5A_COMB.pep:*
- 2: /cgn2_6/prodata/1/iaa/5B_COMB.pep:*
- 3: /cgn2_6/prodata/1/iaa/5A_COMB.pep:*
- 4: /cgn2_6/prodata/1/iaa/5B_COMB.pep:*
- 5: /cgn2_6/prodata/1/iaa/PCTUS_COMB.pep:*
- 6: /cgn2_6/prodata/1/iaa/backfillsl.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	2228	100.0	411	1	US-08-381-433A-4
2	2228	100.0	411	3	US-08-981-189B-12
3	2228	100.0	411	4	US-09-799-978-18
4	2228	100.0	411	4	US-09-881-401-4
5	2111	94.7	411	4	US-09-631-603-12
6	2106	94.5	411	1	US-08-381-433A-8
7	2106	94.5	411	4	US-09-799-978-10
8	2106	94.5	411	4	US-09-881-401-8
9	2055.5	92.3	431	3	US-08-981-189B-13
10	2055.5	92.3	431	4	US-09-881-401-2
11	2049.5	92.0	431	1	US-08-381-433A-2
12	2042.5	91.7	431	4	US-09-799-978-20
13	2026.5	91.0	431	3	US-08-981-189B-11
14	2026.5	91.0	431	3	US-08-482-746-10
15	2026.5	91.0	431	4	US-09-580-734-10
16	2026.5	91.0	431	4	US-08-374-009-10
17	2026.5	91.0	431	4	US-09-191-724-10
18	2026.5	91.0	431	4	US-09-799-978-24
19	1999	89.7	430	4	US-09-799-978-26
20	1963	88.1	437	4	US-09-799-978-14
21	1962	88.1	438	4	US-09-799-978-12
22	1793	80.5	413	4	US-09-799-978-32
23	1787	80.2	405	4	US-09-799-978-38
24	1593	71.5	420	4	US-09-799-978-42
25	1574	70.6	415	1	US-08-110-286A-2
26	1574	70.6	415	3	US-08-482-746-2
27	1574	70.6	415	4	US-09-580-734-2

28	1574	70.6	415	4	US-08-374-009-2	Sequence 2, Appl1
29	1574	70.6	415	4	US-09-191-724-2	Sequence 2, Appl1
30	1574	70.6	415	4	US-09-799-978-2	Sequence 2, Appl1
31	1574	70.6	415	4	US-09-799-978-4	Sequence 4, Appl1
32	1569	70.4	415	3	US-08-482-746-13	Sequence 13, Appl1
33	1569	70.4	415	4	US-09-580-734-13	Sequence 13, Appl1
34	1569	70.4	415	4	US-08-374-009-13	Sequence 13, Appl1
35	1569	70.4	415	4	US-09-191-724-13	Sequence 13, Appl1
36	1569	70.4	415	4	US-09-799-978-22	Sequence 22, Appl1
37	1568	70.4	415	4	US-09-826-509-483	Sequence 483, App
38	1563	70.2	415	4	US-09-799-978-40	Sequence 40, Appl1
39	1562	70.1	445	4	US-09-799-978-34	Sequence 34, Appl1
40	1561	70.1	415	1	US-08-110-286A-6	Sequence 6, Appl1
41	1561	70.1	415	3	US-08-981-189B-10	Sequence 10, Appl1
42	1561	70.1	415	3	US-08-482-746-6	Sequence 6, Appl1
43	1561	70.1	415	4	US-09-580-734-6	Sequence 6, Appl1
44	1561	70.1	415	4	US-08-374-009-6	Sequence 6, Appl1
45	1561	70.1	415	4	US-09-191-724-6	Sequence 6, Appl1

ALIGNMENTS

RESULT 1
US-08-381-433A-4
; Sequence 4, Application US/08381433A
; Patent No. 5786203
; GENERAL INFORMATION:
; APPLICANT: Lovenberg, Timothy W.
; APPLICANT: Olerdoff, Tilmann
; APPLICANT: Liaw, Chen
; APPLICANT: Grigoridiadis, Dimitri E.
; APPLICANT: Desouza, Eriol B.
; TITLE OF INVENTION: CORTICOTROPIN RELEASING FACTOR 2
; NUMBER OF SEQUENCES: 8
; CORRESPONDENCE ADDRESSES:
; ADDRESSEE: SEED and BERRY
; STREET: 6300 Columbia Center, 701 Fifth Avenue
; City: Seattle
; STATE: Washington
; COUNTRY: USA
; ZIP: 98104-7092
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/381,433A
; FILING DATE: 31-JAN-1995
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: McMaisters, David D.
; REGISTRATION NUMBER: 33, 963
; REFERENCE/DOCKET NUMBER: 690068, 401C1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (206) 622-4900
; TELEFAX: (206) 682-6031
; TELEX: 3723836 SEEDANDBERRY
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 411 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-381-433A-4
Query Match 100.0%; Score 2228; DB 1; Length 411;
Best Local Similarity 100.0%; Pred. No. 1.3e-205;
Matches 411; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 MDALLSLILEANCSIALAEILLDQWGPDPPEGPYSYCNITLQIGTCWPOSAGALV 60

```
Db 1 MDALLSLLEFNCSLALAEELLDGMBPDPBPSPYSYCTTLDQIGTCMPQSPAGALV 60
QY 61 ERPCPEYENGKIKYNTTRNAYRECLNGTWASRINYSHCEPILDDKORKYDHYRIALIIN 120
Db 61 ERPCPEYENGKIKYNTTRNAYRECLNGTWASRINYSHCEPILDDKORKYDHYRIALIIN 120
QY 121 YLGHCVSVVALVAAPFLFLVLRISIRCLRNVIHWNLIITFFILRNITWFLQLDIDHEVHGN 180
Db 121 YLGHCVSVVALVAAPFLFLVLRISIRCLRNVIHWNLIITFFILRNITWFLQLDIDHEVHGN 180
QY 181 EVMGCCTTINNYFVNTNPFMMFVGCYLHAIWNTYSTEHKRLFLFIGMCI PCPIIV 240
Db 181 EVMGCCTTINNYFVNTNPFMMFVGCYLHAIWNTYSTEHKRLFLFIGMCI PCPIIV 240
QY 241 AMAVGKLYENEGCMFGKEPGLVDYIYQGPILVLLINFEVFNIVILMTKLRASSTTS 300
Db 241 AMAVGKLYENEGCMFGKEPGLVDYIYQGPILVLLINFEVFNIVILMTKLRASSTTS 300
QY 301 ETIQYRKAVKATLVLLPLIGITTYMLFVNPGEDLSQIVFIYFNSFLOSFGFVSVFYC 360
Db 301 ETIQYRKAVKATLVLLPLIGITTYMLFVNPGEDLSQIVFIYFNSFLOSFGFVSVFYC 360
QY 361 FPNGEVRSALRKRWHRMODHALLRVPARAMSIPSPTRISFHSIKOTAAV 411
Db 361 FPNGEVRSALRKRWHRMODHALLRVPARAMSIPSPTRISFHSIKOTAAV 411
```

RESULT 2

```
US-08-981-189B-12
; Sequence 12, Application US/08981189B
; Patent No. 6214797
; GENERAL INFORMATION:
; APPLICANT:
; TITLE OF INVENTION: UROCORTIN PEPTIDES
; NUMBER OF SEQUENCES: 19
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: FITCH, EVEN, TABIN & FLANNERY
; STREET: 120 S. LaSalle Street, Suite 1600
; CITY: Chicago
; STATE: Illinois
; COUNTRY: USA
; ZIP: 60603
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/981,189B
; FILING DATE: 10-DEC-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/028,144
; FILING DATE: 13-JUN-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/002,223
; FILING DATE: 11-AUG-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Schumann, James J.
; REGISTRATION NUMBER: 20, 856
; REFERENCE/DOCKET NUMBER: 57611
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 858-552-1311
; TELEFAX: 858-552-0095
; INFORMATION FOR SEQ ID NO: 12:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 411 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; FEATURE:
; NAME/KEY: Protein
; LOCATION: 1..411
```

```
; OTHER INFORMATION: /note= "Rat CRF-R2 Short Form"
; PUBLICATION INFORMATION:
; AUTHORS: Lovenberg, Timothy W
; AUTHORS: Liaw, Chen W
; AUTHORS: Grigoriadis, Dimitri E
; AUTHORS: Clevenger, William
; AUTHORS: Chalmers, Derek T
; AUTHORS: Desouza, Errol B
; TITLE: Cloning and characterization of a
; TITLE: functionally distinct corticotropin-releasing
; TITLE: factor receptor subtype from rat brain
; JOURNAL: Proc. Natl. Acad. Sci. U.S.A.
; VOLUME: 92
; PAGES: 836-840
; DATE: January-1995
US-08-981-189B-12
```

```
Query Match 100.0%; Score 2228; DB 3; Length 411;
Best local Similarity 100.0%; Pred. No. 1,3e-205;
Matches 411; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 MDALLSLLEFNCSLALAEELLDGMBPDPBPSPYSYCTTLDQIGTCMPQSPAGALV 60
Db 1 MDALLSLLEFNCSLALAEELLDGMBPDPBPSPYSYCTTLDQIGTCMPQSPAGALV 60
QY 61 ERPCPEYENGKIKYNTTRNAYRECLNGTWASRINYSHCEPILDDKORKYDHYRIALIIN 120
Db 61 ERPCPEYENGKIKYNTTRNAYRECLNGTWASRINYSHCEPILDDKORKYDHYRIALIIN 120
QY 121 YLGHCVSVVALVAAPFLFLVLRISIRCLRNVIHWNLIITFFILRNITWFLQLDIDHEVHGN 180
Db 121 YLGHCVSVVALVAAPFLFLVLRISIRCLRNVIHWNLIITFFILRNITWFLQLDIDHEVHGN 180
QY 181 EVMGCCTTINNYFVNTNPFMMFVGCYLHAIWNTYSTEHKRLFLFIGMCI PCPIIV 240
Db 181 EVMGCCTTINNYFVNTNPFMMFVGCYLHAIWNTYSTEHKRLFLFIGMCI PCPIIV 240
QY 241 AMAVGKLYENEGCMFGKEPGLVDYIYQGPILVLLINFEVFNIVILMTKLRASSTTS 300
Db 241 AMAVGKLYENEGCMFGKEPGLVDYIYQGPILVLLINFEVFNIVILMTKLRASSTTS 300
QY 301 ETIQYRKAVKATLVLLPLIGITTYMLFVNPGEDLSQIVFIYFNSFLOSFGFVSVFYC 360
Db 301 ETIQYRKAVKATLVLLPLIGITTYMLFVNPGEDLSQIVFIYFNSFLOSFGFVSVFYC 360
QY 361 FPNGEVRSALRKRWHRMODHALLRVPARAMSIPSPTRISFHSIKOTAAV 411
Db 361 FPNGEVRSALRKRWHRMODHALLRVPARAMSIPSPTRISFHSIKOTAAV 411
```

RESULT 3

```
US-09-799-978-18
; Sequence 18, Application US/09799978
; Patent No. 6670140
; GENERAL INFORMATION:
; APPLICANT: The Procter & Gamble Company
; APPLICANT: Isfort, Robert
; APPLICANT: Sheldon, Russell
; TITLE OF INVENTION: Methods for Identifying Compounds for Regulating Muscle Mass or
; TITLE OF INVENTION: Function Using Corticotropin Releasing Factor Receptors
; FILE REFERENCE: 8448
; CURRENT APPLICATION NUMBER: US/09/799,978
; CURRENT FILING DATE: 2001-03-06
; NUMBER OF SEQ ID NOS: 44
; SOFTWARE: Patentin version 3.0
; SEQ ID NO 18
; LENGTH: 411
; TYPE: PRT
; ORGANISM: Rattus norvegicus
US-09-799-978-18
```

```
Query Match 100.0%; Score 2228; DB 4; Length 411;
```


Best Local Similarity 100.0%; Pred. No. 1.3e-205;
Matches 411; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MDAALLSLLEANCSTALAEELLDDMGEPPEGGPYSCNTTLDIGTCWPSAGALV 60
1 MDAALLSLLEANCSTALAEELLDDMGEPPEGGPYSCNTTLDIGTCWPSAGALV 60
DB 1 MDAALLSLLEANCSTALAEELLDDMGEPPEGGPYSCNTTLDIGTCWPSAGALV 60
QY 61 ERPCPEYFNGIKYNTTRNAVRECLNGTWASRINSHCEPIIDDKORKYDLHYRIALIIIN 120
61 ERPCPEYFNGIKYNTTRNAVRECLNGTWASRINSHCEPIIDDKORKYDLHYRIALIIIN 120
DB 121 YLGHCVSVALVAFLFLVLRISIRCLRVNIHNNLTITFLRNIITWFLQLIDHEVEHGN 180
121 YLGHCVSVALVAFLFLVLRISIRCLRVNIHNNLTITFLRNIITWFLQLIDHEVEHGN 180
QY 181 EWRCRCVTITFNFFVNTNFFMFWVEGCVLHTAIWMTYSTHLRKMLFLFGMCIPCPIIV 240
181 EWRCRCVTITFNFFVNTNFFMFWVEGCVLHTAIWMTYSTHLRKMLFLFGMCIPCPIIV 240
DB 241 AMAVGKLYYENECWCFGEKPEGDLVDYIYOGPIILVLLINFLVFNIVIRIIMTKLRASSTTS 300
241 AMAVGKLYYENECWCFGEKPEGDLVDYIYOGPIILVLLINFLVFNIVIRIIMTKLRASSTTS 300
QY 301 ETIQYRKAVKATVLLPLGITYMLFFVUNGEDDSQIVFIYFNSFLQSFQGFVSVFYC 360
301 ETIQYRKAVKATVLLPLGITYMLFFVUNGEDDSQIVFIYFNSFLQSFQGFVSVFYC 360
DB 361 FENGVEVSALRKRMHMODHHLRVPARAMSIPTSPTRISPHSIKOTAAV 411
361 FENGVEVSALRKRMHMODHHLRVPARAMSIPTSPTRISPHSIKOTAAV 411

RESULT 4
US-09-681-401-4
Sequence 4, Application US/09881401
Patent No. 6723841
GENERAL INFORMATION:
APPLICANT: Lovenberg, Timothy W.
Olcedorof, Tilmann
Liao, Chen
Grigoriadis, Dimitri E.
Desouza, Derek T.
TITLE OF INVENTION: CORICOTROPIN RELEASING FACTOR 2
RECEPTORS
NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
ADDRESSEE: Seed Intellectual Property Law Group
STREET: 701 Fifth Avenue, Suite 6300
CITY: Seattle
STATE: Washington
COUNTRY: USA
ZIP: 98104-7092
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent'n Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/881,401
FILING DATE: 13-Jun-2001
CLASSIFICATION: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Christensen, William T.
REGISTRATION NUMBER: 44,614
REFERENCE/DOCKET NUMBER: 690068,401C4
TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 622-4900
TELEFAX: (206) 682-6031
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 411 amino acids
TYPE: amino acid

TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-09-881-401-4

Query Match 100.0%; Score 2228; DB 4; Length 411;
Best Local Similarity 100.0%; Pred. No. 1.3e-205;
Matches 411; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MDAALLSLLEANCSTALAEELLDDMGEPPEGGPYSCNTTLDIGTCWPSAGALV 60
1 MDAALLSLLEANCSTALAEELLDDMGEPPEGGPYSCNTTLDIGTCWPSAGALV 60
DB 1 MDAALLSLLEANCSTALAEELLDDMGEPPEGGPYSCNTTLDIGTCWPSAGALV 60
QY 61 ERPCPEYFNGIKYNTTRNAVRECLNGTWASRINSHCEPIIDDKORKYDLHYRIALIIIN 120
61 ERPCPEYFNGIKYNTTRNAVRECLNGTWASRINSHCEPIIDDKORKYDLHYRIALIIIN 120
DB 121 YLGHCVSVALVAFLFLVLRISIRCLRVNIHNNLTITFLRNIITWFLQLIDHEVEHGN 180
121 YLGHCVSVALVAFLFLVLRISIRCLRVNIHNNLTITFLRNIITWFLQLIDHEVEHGN 180
QY 181 EWRCRCVTITFNFFVNTNFFMFWVEGCVLHTAIWMTYSTHLRKMLFLFGMCIPCPIIV 240
181 EWRCRCVTITFNFFVNTNFFMFWVEGCVLHTAIWMTYSTHLRKMLFLFGMCIPCPIIV 240
DB 241 AMAVGKLYYENECWCFGEKPEGDLVDYIYOGPIILVLLINFLVFNIVIRIIMTKLRASSTTS 300
241 AMAVGKLYYENECWCFGEKPEGDLVDYIYOGPIILVLLINFLVFNIVIRIIMTKLRASSTTS 300
QY 301 ETIQYRKAVKATVLLPLGITYMLFFVUNGEDDSQIVFIYFNSFLQSFQGFVSVFYC 360
301 ETIQYRKAVKATVLLPLGITYMLFFVUNGEDDSQIVFIYFNSFLQSFQGFVSVFYC 360
DB 361 FENGVEVSALRKRMHMODHHLRVPARAMSIPTSPTRISPHSIKOTAAV 411
361 FENGVEVSALRKRMHMODHHLRVPARAMSIPTSPTRISPHSIKOTAAV 411

RESULT 5
US-09-631-603-12
Sequence 12, Application US/09631603
Patent No. 6733990
GENERAL INFORMATION:
APPLICANT: Hodge, Martin R.
APPLICANT: Lloyd, Claire
APPLICANT: Welch, Nadine
TITLE OF INVENTION: 15771, A NO. 6733990e1 GPCR-like Molecule of the
FILE REFERENCE: 5800-48A
CURRENT APPLICATION NUMBER: US/09/631,603
CURRENT FILING DATE: 2000-08-03
PRIOR APPLICATION NUMBER: 09/515,781
PRIOR FILING DATE: 2000-02-29
PRIOR APPLICATION NUMBER: 60/146,916
NUMBER OF SEQ ID NOS: 24
SOFTWARE: FastSeq for Windows Version 3.0
SEQ ID NO 12
LENGTH: 411
TYPE: PRT
ORGANISM: Homo sapiens
US-09-631-603-12

Query Match 94.7%; Score 2111; DB 4; Length 411;
Best Local Similarity 93.9%; Pred. No. 2.3e-194;
Matches 386; Conservative 13; Mismatches 12; Indels 0; Gaps 0;

QY 1 MDAALLSLLEANCSTALAEELLDDMGEPPEGGPYSCNTTLDIGTCWPSAGALV 60
1 MDAALLSLLEANCSTALAEELLDDMGEPPEGGPYSCNTTLDIGTCWPSAGALV 60
DB 1 MDAALLSLLEANCSTALAEELLDDMGEPPEGGPYSCNTTLDIGTCWPSAGALV 60
QY 61 ERPCPEYFNGIKYNTTRNAVRECLNGTWASRINSHCEPIIDDKORKYDLHYRIALIIIN 120
61 ERPCPEYFNGIKYNTTRNAVRECLNGTWASRINSHCEPIIDDKORKYDLHYRIALIIIN 120

Db 61 ERPCEYENGKYNVTRNAARECLNENGTWASKINYSOCEPIIDDKORKYDHYRIALVYN 120
QY 121 YLGHCVSVAALVAAPFLFLVRSIRCLRNVIHNMILITTFILRNITWFLLOLIDHEVHSGN 180
Db 121 YLGHCVSVAALVAAPFLFLALRSIRCLRNVIHNMILITTFILRNWVWFLLOLVDHEVHSGN 180
QY 181 EWMGCCTTTINNYFVNTNFPMFVEGCYLHAIWNTYSTELRKMLFLFIGMCIPPIIV 240
Db 181 EWMGCCTTTINNYFVNTNFPMFVEGCYLHAIWNTYSTELRKMLFLFIGMCIPPIIV 240
QY 241 AMAVGKLYYENOCMFGKEPGDLVDYIYOGPIILVLLINPFLFNIVRIILMTKLRASSTS 300
Db 241 AMAVGKLYYENOCMFGKEPGDLVDYIYOGPIILVLLINPFLFNIVRIILMTKLRASSTS 300
QY 301 ETIOYRKAVKATVLLPLLGITTYMLFVNPGEEDLSQIVFIYNSFLQSFQGFVSVFYC 360
Db 301 ETIOYRKAVKATVLLPLLGITTYMLFVNPGEEDLSQIVFIYNSFLQSFQGFVSVFYC 360
QY 361 FNGEVSRLKRMHMODHSLRPVAPARASIPSPTRISFHSIKOTAAV 411
Db 361 FNGEVSRLKRMHMODHSLRPVAPARASIPSPTRISFHSIKOTAAV 411

RESULT 6
US-08-381-433A-8
Sequence 8, Application US/08381433A
Patent No. 5786203
GENERAL INFORMATION:
APPLICANT: Lovenberg, Timothy W.
APPLICANT: Oltersdorf, Tilman
APPLICANT: Liaw, Chen
APPLICANT: Grigoridis, Dimitri E.
APPLICANT: Desouza, Erol B.
TITLE OF INVENTION: CORTICOTROPIN RELEASING FACTOR 2
TITLE OF INVENTION: RECEPTORS
NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
ADDRESSEE: SEED and BERRY
STREET: 6300 Columbia Center, 701 Fifth Avenue
CITY: Seattle
STATE: Washington
COUNTRY: USA
ZIP: 98104-7092
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/381,433A
FILING DATE: 31-JAN-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: McMaesters, David D.
REGISTRATION NUMBER: 33,963
REFERENCE/DOCKET NUMBER: 690068.401C1
TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 622-4900
TELEFAX: (206) 682-6031
TELEX: 3723836 SEEDANDBERRY
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 411 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-381-433A-8

Query Match 94.5%; Score 2106; DB 1; Length 411;
Best Local Similarity 93.7%; Pred. No. 7e-194;
Matches 385; Conservative 13; Mismatches 13; Indels 0; Gaps 0;
QY 1 MDALLLSLEANCSTALAEELLIDGMBPDPPEGYSYCNNTTLDIGTCWPOSAGALV 60

Db 1 MDALLLSLEANCSTALAEELLIDGMBPDPPEGYSYCNNTTLDIGTCWPOSAGALV 60
QY 61 ERPCEYENGKYNVTRNAARECLNENGTWASKINYSOCEPIIDDKORKYDHYRIALVYN 120
Db 61 ERPCEYENGKYNVTRNAARECLNENGTWASKINYSOCEPIIDDKORKYDHYRIALVYN 120
QY 121 YLGHCVSVAALVAAPFLFLVRSIRCLRNVIHNMILITTFILRNITWFLLOLIDHEVHSGN 180
Db 121 YLGHCVSVAALVAAPFLFLALRSIRCLRNVIHNMILITTFILRNWVWFLLOLVDHEVHSGN 180
QY 181 EWMGCCTTTINNYFVNTNFPMFVEGCYLHAIWNTYSTELRKMLFLFIGMCIPPIIV 240
Db 181 EWMGCCTTTINNYFVNTNFPMFVEGCYLHAIWNTYSTELRKMLFLFIGMCIPPIIV 240
QY 241 AMAVGKLYYENOCMFGKEPGDLVDYIYOGPIILVLLINPFLFNIVRIILMTKLRASSTS 300
Db 241 AMAVGKLYYENOCMFGKEPGDLVDYIYOGPIILVLLINPFLFNIVRIILMTKLRASSTS 300
QY 301 ETIOYRKAVKATVLLPLLGITTYMLFVNPGEEDLSQIVFIYNSFLQSFQGFVSVFYC 360
Db 301 ETIOYRKAVKATVLLPLLGITTYMLFVNPGEEDLSQIVFIYNSFLQSFQGFVSVFYC 360
QY 361 FNGEVSRLKRMHMODHSLRPVAPARASIPSPTRISFHSIKOTAAV 411
Db 361 FNGEVSRLKRMHMODHSLRPVAPARASIPSPTRISFHSIKOTAAV 411

RESULT 7
US-09-799-978-10
Sequence 10, Application US/09799978
Patent No. 6670140
GENERAL INFORMATION:
APPLICANT: The Procter & Gamble Company
APPLICANT: Isifort, Robert
APPLICANT: Sheldon, Russell
TITLE OF INVENTION: Methods for Identifying Compounds for Regulating Muscle Mass or
TITLE OF INVENTION: Function Using Corticotropin Releasing Factor Receptors
FILE REFERENCE: 8448
CURRENT APPLICATION NUMBER: US/09/799,978
CURRENT FILING DATE: 2001-03-06
NUMBER OF SEQ ID NOS: 44
SOFTWARE: Patentin version 3.0
SEQ ID NO 10
LENGTH: 411
TYPE: PRT
ORGANISM: Homo sapiens
US-09-799-978-10

Query Match 94.5%; Score 2106; DB 4; Length 411;
Best Local Similarity 93.7%; Pred. No. 7e-194;
Matches 385; Conservative 13; Mismatches 13; Indels 0; Gaps 0;
QY 1 MDALLLSLEANCSTALAEELLIDGMBPDPPEGYSYCNNTTLDIGTCWPOSAGALV 60
Db 1 MDALLLSLEANCSTALAEELLIDGMBPDPPEGYSYCNNTTLDIGTCWPOSAGALV 60
QY 61 ERPCEYENGKYNVTRNAARECLNENGTWASKINYSOCEPIIDDKORKYDHYRIALVYN 120
Db 61 ERPCEYENGKYNVTRNAARECLNENGTWASKINYSOCEPIIDDKORKYDHYRIALVYN 120
QY 121 YLGHCVSVAALVAAPFLFLVRSIRCLRNVIHNMILITTFILRNITWFLLOLIDHEVHSGN 180
Db 121 YLGHCVSVAALVAAPFLFLALRSIRCLRNVIHNMILITTFILRNWVWFLLOLVDHEVHSGN 180
QY 181 EWMGCCTTTINNYFVNTNFPMFVEGCYLHAIWNTYSTELRKMLFLFIGMCIPPIIV 240
Db 181 EWMGCCTTTINNYFVNTNFPMFVEGCYLHAIWNTYSTELRKMLFLFIGMCIPPIIV 240
QY 241 AMAVGKLYYENOCMFGKEPGDLVDYIYOGPIILVLLINPFLFNIVRIILMTKLRASSTS 300
Db 241 AMAVGKLYYENOCMFGKEPGDLVDYIYOGPIILVLLINPFLFNIVRIILMTKLRASSTS 300

QY 301 ETIQKAVKATVLLPLIGITYMLFVNPGEDDLSQIVFIYNSFLQSFOGFFVSVPYC 360
DB 301 ETIQKAVKATVLLPLIGITYMLFVNPGEDDLSQIMFIYNSFLQSFOGFFVSVPYC 360
QY 361 FNGEVSRLRRKRWODHSLRVPVARSIPSPTRISPSIKQTAAV 411
DB 361 FNGEVSRLRRKRWODHSLRVPVARSIPSPTRISPSIKQTAAV 411

RESULT 8

US-09-881-401-8
Sequence 8, Application US/09881401
Patent No. 6723841

GENERAL INFORMATION:
APPLICANT: Lovenberg, Timothy W.
Olterdorf, Tilman
Llao, Chen
Grigoriadis, Dimitri E.
Chalmers, Derek T.
Desouza, Errol B.

TITLE OF INVENTION: CORTICOTROPIN RELEASING FACTOR 2
RECEPTORS

NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:

ADDRESSEE: Seed Intellectual Property Law Group
STREET: 701 Fifth Avenue, Suite 6300
CITY: Seattle
STATE: Washington
COUNTRY: USA
ZIP: 98104-7092

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/881,401
FILING DATE: 13-Jun-2001
CLASSIFICATION: <Unknown>

ATTORNEY/AGENT INFORMATION:
NAME: Christensen, William T.
REGISTRATION NUMBER: 44,614
REFERENCE/DOCKET NUMBER: 690068.401C4

TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 622-4900
TELEFAX: (206) 682-6031

INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 411 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein

SEQUENCE DESCRIPTION: SEQ ID NO: 8:
US-09-881-401-8

Query Match 94.5%; Score 2106; DB 4; Length 411;
Best Local Similarity 93.7%; Pred. No. 7e-194;

Matches 385; Conservative 13; Mismatches 13; Indels 0; Gaps 0;

QY 1 MDALLSLLEANCSTLAELLDGSGPPDEGYSYCNLTLDIGTCWPSAGALV 60
DB 1 MDALLSLLEANCSTLAELLDGSGPPDEGYSYCNLTLDIGTCWPSAGALV 60
QY 61 ERPCPEYNGIKYNTNRNAVRECLNGTWASRINYSQCEPIIDDKRKXVDHRIALIN 120
DB 61 ERPCPEYNGIKYNTNRNAVRECLNGTWASRINYSQCEPIIDDKRKXVDHRIALIN 120
QY 121 YGHGCVSVALVAFLPLVLSIRCLRVNIHWNLTITFLRNITWFLQLIDHEVEHGN 180
DB 121 YGHGCVSVALVAFLPLVLSIRCLRVNIHWNLTITFLRNITWFLQLIDHEVEHGN 180
QY 181 EWCRCVTTIFNVFVVTNFMFVVEGCVLHTAIVMTYSTEHRLKXWFLFIGWCIPPIIV 240
DB 181 EWCRCVTTIFNVFVVTNFMFVVEGCVLHTAIVMTYSTEHRLKXWFLFIGWCIPPIIV 240

DB 181 EWCRCVTTIFNVFVVTNFMFVVEGCVLHTAIVMTYSTEHRLKXWFLFIGWCIPPIIV 240
QY 241 AAAGKLYENECQWKEKPGDLVDYIYOGPIILVLLINFELENIIVRIIMTLKRASTTS 300
DB 241 AAAGKLYENECQWKEKPGDLVDYIYOGPIILVLLINFELENIIVRIIMTLKRASTTS 300
QY 301 ETIQKAVKATVLLPLIGITYMLFVNPGEDDLSQIVFIYNSFLQSFOGFFVSVPYC 360
DB 301 ETIQKAVKATVLLPLIGITYMLFVNPGEDDLSQIMFIYNSFLQSFOGFFVSVPYC 360
QY 361 FNGEVSRLRRKRWODHSLRVPVARSIPSPTRISPSIKQTAAV 411
DB 361 FNGEVSRLRRKRWODHSLRVPVARSIPSPTRISPSIKQTAAV 411

RESULT 9

US-08-981-189B-13
Sequence 13, Application US/08981189B
Patent No. 6214797

GENERAL INFORMATION:
APPLICANT: UROCORTIN PEPTIDES

TITLE OF INVENTION: UROCORTIN PEPTIDES

NUMBER OF SEQUENCES: 19
CORRESPONDENCE ADDRESS:

ADDRESSEE: FITCH, EVEN, TABIN & FLANNERY
STREET: 120 S. LaSalle Street, Suite 1600
CITY: Chicago
STATE: Illinois
COUNTRY: USA
ZIP: 60603

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/981,189B
FILING DATE: 10-DEC-1997
Prior APPLICATION DATA:
APPLICATION NUMBER: US 60/028,144
FILING DATE: 13-JUN-1995

Prior APPLICATION DATA:
APPLICATION NUMBER: US 60/002,223
FILING DATE: 11-AUG-1995

ATTORNEY/AGENT INFORMATION:
NAME: Schumann, James J.
REGISTRATION NUMBER: 20,856
REFERENCE/DOCKET NUMBER: 57611

TELECOMMUNICATION INFORMATION:
TELEPHONE: 858-552-1311
TELEFAX: 858-552-0095

INFORMATION FOR SEQ ID NO: 13:
SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein

FEATURE:
NAME/KEY: Protein
LOCATION: 1..431
OTHER INFORMATION: /note="Rat CRF-R2 Long Form"

PUBLICATION INFORMATION:
AUTHORS: Lovenberg, Timothy W
AUTHORS: Llao, Chen W
AUTHORS: Grigoriadis, Dimitri E
AUTHORS: Cleveneger, William
AUTHORS: Chalmers, Derek T
AUTHORS: Desouza, Errol B
AUTHORS: Olterdorf, Tilman

TITLE: Cloning and characterization of a
functionally distinct corticotropin-releasing
factor receptor subtype from rat brain
JOURNAL: Proc. Natl. Acad. Sci. U.S.A.

VOLUME: 92
PAGES: 836-840
DATE: January-1995
US-08-981-189B-13

Query Match 92.3%; Score 205.5; DB 3; Length 431;
Best Local Similarity 94.1%; Pred. No. 5.3e-189;

Matches 382; Conservative 1; Mismatches 12; Indels 11; Gaps 1;

QY 6 LLSLEANCSTALAEELLDGMBPDEGPPSYGNTTLDIGTCWPOSAGALVERPCP 65
DB 37 LMTLEQYCHRTTNNF-----SGPYSCNTTLDIGTCWPOSAGALVERPCP 85
QY 66 EYFNGIKYNTTRNAVRECLNGTWSARINYSHCEPILDDKORKYDLHYRIALIINYLGHC 125
DB 86 EYFNGIKYNTTRNAVRECLNGTWSARINYSHCEPILDDKORKYDLHYRIALIINYLGHC 145
QY 126 VSVVALVAAPFLFLVLRISIRCLRNVIHWNLTFTFLRNTWFLQLIDHEVHEGNEVWCR 185
DB 146 VSVVALVAAPFLFLVLRISIRCLRNVIHWNLTFTFLRNTWFLQLIDHEVHEGNEVWCR 205
QY 186 CVTTIFNFVVTNPFMMFVEGCGYLHTAIVMTYSTELRKMLFLFGWCI PCPIIYAMAVG 245
DB 206 CVTTIFNFVVTNPFMMFVEGCGYLHTAIVMTYSTELRKMLFLFGWCI PCPIIYAMAVG 265
QY 246 KLYYENECQWFKPEGDLVDYIYOGPIILVLLINFLVFNIVRIIMTKLRASTSETIY 305
DB 266 KLYYENECQWFKPEGDLVDYIYOGPIILVLLINFLVFNIVRIIMTKLRASTSETIY 325
QY 306 RKAVALTVLPLGITTYMLFFVNPGEEDLSQIVFIYNSFLQSGFVSVFCFENG 365
DB 326 RKAVALTVLPLGITTYMLFFVNPGEEDLSQIVFIYNSFLQSGFVSVFCFENG 385
QY 366 VRSALRKRMHMODHHLRVPARAMSIPSTRISFSHIKOTAAV 411
DB 386 VRSALRKRMHMODHHLRVPARAMSIPSTRISFSHIKOTAAV 431

RESULT 10

US-09-881-401-2
Sequence 2, Application US/09881401

Patent No. 6723841

GENERAL INFORMATION:

APPLICANT: Lovenberg, Timothy W.

Olterdorf, Tilman

Liaw, Chen

Grigoriadis, Dimitri E.

Chalmers, Derek T.

Desouza, Etrol B.

TITLE OF INVENTION: CORTICOTROPIN RELEASING FACTOR 2

RECEPTORS

NUMBER OF SEQUENCES: 8

CORRESPONDENCE ADDRESS:

ADDRESSEE: Seed Intellectual Property Law Group

STREET: 701 Fifth Avenue, Suite 6300

CITY: Seattle

STATE: Washington

COUNTRY: USA

ZIP: 98104-7092

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/881,401

FILING DATE: 13-Jun-2001

CLASSIFICATION: <Unknown>

ATTORNEY/AGENT INFORMATION:

NAME: Christiansen, William T.

REGISTRATION NUMBER: 44,614

REFERENCE/DOCKET NUMBER: 690068,401C4

TELECOMMUNICATION INFORMATION:

TELEPHONE: (206) 622-4900

TELEFAX: (206) 682-6031

INFORMATION FOR SEQ ID NO: 2:

SEQUENCE CHARACTERISTICS:

LENGTH: 431 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: protein

SEQUENCE DESCRIPTION: SEQ ID NO: 2:

US-09-881-401-2

Query Match 92.3%; Score 205.5; DB 4; Length 431;
Best Local Similarity 94.1%; Pred. No. 5.3e-189;

Matches 382; Conservative 1; Mismatches 12; Indels 11; Gaps 1;

QY 6 LLSLEANCSTALAEELLDGMBPDEGPPSYGNTTLDIGTCWPOSAGALVERPCP 65
DB 37 LMTLEQYCHRTTNNF-----SGPYSCNTTLDIGTCWPOSAGALVERPCP 85
QY 66 EYFNGIKYNTTRNAVRECLNGTWSARINYSHCEPILDDKORKYDLHYRIALIINYLGHC 125
DB 86 EYFNGIKYNTTRNAVRECLNGTWSARINYSHCEPILDDKORKYDLHYRIALIINYLGHC 145
QY 126 VSVVALVAAPFLFLVLRISIRCLRNVIHWNLTFTFLRNTWFLQLIDHEVHEGNEVWCR 185
DB 146 VSVVALVAAPFLFLVLRISIRCLRNVIHWNLTFTFLRNTWFLQLIDHEVHEGNEVWCR 205
QY 186 CVTTIFNFVVTNPFMMFVEGCGYLHTAIVMTYSTELRKMLFLFGWCI PCPIIYAMAVG 245
DB 206 CVTTIFNFVVTNPFMMFVEGCGYLHTAIVMTYSTELRKMLFLFGWCI PCPIIYAMAVG 265
QY 246 KLYYENECQWFKPEGDLVDYIYOGPIILVLLINFLVFNIVRIIMTKLRASTSETIY 305
DB 266 KLYYENECQWFKPEGDLVDYIYOGPIILVLLINFLVFNIVRIIMTKLRASTSETIY 325
QY 306 RKAVALTVLPLGITTYMLFFVNPGEEDLSQIVFIYNSFLQSGFVSVFCFENG 365
DB 326 RKAVALTVLPLGITTYMLFFVNPGEEDLSQIVFIYNSFLQSGFVSVFCFENG 385
QY 366 VRSALRKRMHMODHHLRVPARAMSIPSTRISFSHIKOTAAV 411
DB 386 VRSALRKRMHMODHHLRVPARAMSIPSTRISFSHIKOTAAV 431

RESULT 11

US-08-381-433A-2
Sequence 2, Application US/08381433A

Patent No. 5786203

GENERAL INFORMATION:

APPLICANT: Lovenberg, Timothy W.

Olterdorf, Tilman

Liaw, Chen

Grigoriadis, Dimitri E.

Chalmers, Derek T.

Desouza, Etrol B.

TITLE OF INVENTION: CORTICOTROPIN RELEASING FACTOR 2

RECEPTORS

NUMBER OF SEQUENCES: 8

CORRESPONDENCE ADDRESS:

ADDRESSEE: Seed and Berry

STREET: 6300 Columbia Center, 701 Fifth Avenue

CITY: Seattle

STATE: Washington

COUNTRY: USA

ZIP: 98104-7092

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/381,433A

FILING DATE: 31-JAN-1995

CLASSIFICATION: 435

```
ATTORNEY/AGENT INFORMATION:
NAME: McMaesters, David D.
REGISTRATION NUMBER: 33,963
REFERENCE/DOCKET NUMBER: 690068,401C1
TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 622-4900
TELEFAX: (206) 682-6031
TELEX: 3723836 SEEDANDBERRY
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-381-433A-2

Query Match      92.0%; Score 2049.5; DB 1; Length 431;
Best Local Similarity 93.8%; Pred. No. 2e-188;
Matches 381; Conservative 1; Mismatches 13; Indels 11; Gaps 1;

QY 6 LLSLEANCSLALAEELLIDGWEPPDPPEGPYSYCNITLIDQIGTCWPOSAPGALVERPCP 65
   | : |||
   37 LMTLEQYCHRTTNNF-----SGPYSYCNITLIDQIGTCWPOSAPGALVERPCP 85
QY 66 EYFNGIKYNTTNNAYRECLNENGTWASRINYSHCEPILDDKORKYDHYRIALINYLGHG 125
   |||||
   DB 86 EYFNGIKYNTTNNAYRECLNENGTWASRINYSHCEPILDDKORKYDHYRIALINYLGHG 145
QY 126 VSVVALVAAFLLFLVLRISRCRLRNVIHNLITTFILRNITWFLQIDHEVHGNEVMCR 185
   |||||
   DB 146 VSVVALVAAFLLFLVLRISRCRLRNVIHNLITTFILRNITWFLQIDHEVHGNEVMCR 205
QY 186 CVTTIFNRYVNTNFMFMFEGCYLHTAIVMTYTEHLRKMFLFGWMCIPCPPIVAMAVG 245
   |||||
   DB 206 CVTTIFNRYVNTNFMFMFEGCYLHTAIVMTYTEHLRKMFLFGWMCIPCPPIVAMAVG 265
QY 246 KLYENEGQCFKPEPDLDVYIYQGPILVLLINPVLNIVRIIMTKLRASSTSETIOY 305
   |||||
   DB 266 KLYENEGQCFKPEPDLDVYIYQGPILVLLINPVLNIVRIIMTKLRASSTSETIOY 325
QY 306 RRAVATVLLPLGLITTYMLFVNPGEDDLSQIVFIYFNSFLQSGFVSVYFCFNGE 365
   |||||
   DB 326 RRAVATVLLPLGLITTYMLFVNPGEDDLSQIVFIYFNSFLQSGFVSVYFCFNGE 385
QY 366 VRSALRKRWHRMODHHLRVPVARAMSIPTSPTRISFHSIKOTAAV 411
   |||||
   DB 386 VRSALRKRWHRMODHHLRVPVARAMSIPTSPTRISFHSIKOTAAV 431

RESULT 12
US-09-799-978-20
; Sequence 20, Application US/09799978
; Patent No. 6670140
; GENERAL INFORMATION:
; APPLICANT: The Procter & Gamble Company
; APPLICANT: Isfort, Robert
; APPLICANT: Sheldon, Russell
; TITLE OF INVENTION: Methods for Identifying Compounds for Regulating Muscle Mass or
; FILE REFERENCE: 8448
; CURRENT APPLICATION NUMBER: US/09/799,978
; CURRENT FILING DATE: 2001-03-06
; NUMBER OF SEQ ID NOS: 44
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 20
; LENGTH: 431
; TYPE: PRT
; ORGANISM: Rattus norvegicus
US-09-799-978-20

Query Match      91.7%; Score 2042.5; DB 4; Length 431;
Best Local Similarity 93.6%; Pred. No. 9.3e-188;
Matches 380; Conservative 1; Mismatches 14; Indels 11; Gaps 1;
```

```
QY 6 LLSLEANCSLALAEELLIDGWEPPDPPEGPYSYCNITLIDQIGTCWPOSAPGALVERPCP 65
   | : |||
   37 LMTLEQYCHRTTNNF-----SGPYSYCNITLIDQIGTCWPOSAPGALVERPCP 85
QY 66 EYFNGIKYNTTNNAYRECLNENGTWASRINYSHCEPILDDKORKYDHYRIALINYLGHG 125
   |||||
   DB 86 EYFNGIKYNTTNNAYRECLNENGTWASRINYSHCEPILDDKORKYDHYRIALINYLGHG 145
QY 126 VSVVALVAAFLLFLVLRISRCRLRNVIHNLITTFILRNITWFLQIDHEVHGNEVMCR 185
   |||||
   DB 146 VSVVALVAAFLLFLVLRISRCRLRNVIHNLITTFILRNITWFLQIDHEVHGNEVMCR 205
QY 186 CVTTIFNRYVNTNFMFMFEGCYLHTAIVMTYTEHLRKMFLFGWMCIPCPPIVAMAVG 245
   |||||
   DB 206 CVTTIFNRYVNTNFMFMFEGCYLHTAIVMTYTEHLRKMFLFGWMCIPCPPIVAMAVG 265
QY 246 KLYENEGQCFKPEPDLDVYIYQGPILVLLINPVLNIVRIIMTKLRASSTSETIOY 305
   |||||
   DB 266 KLYENEGQCFKPEPDLDVYIYQGPILVLLINPVLNIVRIIMTKLRASSTSETIOY 325
QY 306 RRAVATVLLPLGLITTYMLFVNPGEDDLSQIVFIYFNSFLQSGFVSVYFCFNGE 365
   |||||
   DB 326 RRAVATVLLPLGLITTYMLFVNPGEDDLSQIVFIYFNSFLQSGFVSVYFCFNGE 385
QY 366 VRSALRKRWHRMODHHLRVPVARAMSIPTSPTRISFHSIKOTAAV 411
   |||||
   DB 386 VRSALRKRWHRMODHHLRVPVARAMSIPTSPTRISFHSIKOTAAV 431

RESULT 13
US-08-981-189B-11
; Sequence 11, Application US/08981189B
; Patent No. 6214797
; GENERAL INFORMATION:
; APPLICANT:
; TITLE OF INVENTION: UROCORTIN PEPTIDES
; NUMBER OF SEQUENCES: 19
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: FITCH, EVEN, TABIN & FLANNERY
; STREET: 120 S. LaSalle Street, Suite 1600
; CITY: Chicago
; STATE: Illinois
; COUNTRY: USA
; ZIP: 60603
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/981,189B
; FILING DATE: 10-DEC-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/028,144
; FILING DATE: 13-JUN-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/002,223
; FILING DATE: 11-AUG-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Schumann, James J.
; REGISTRATION NUMBER: 20,856
; REFERENCE/DOCKET NUMBER: 57611
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 858-552-0095
; TELEFAX: 858-552-1311
; INFORMATION FOR SEQ ID NO: 11:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 431 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; FEATURE:
```

```
NAME/KEY: Protein
LOCATION: 1..431 /note= "Product-mouse heart derived
OTHER INFORMATION: CRF-R2 Long Form"
PUBLICATION INFORMATION:
AUTHORS: Perrin, Marilyn
AUTHORS: Donaldson, Cynthia
AUTHORS: Chen, Ruoping
AUTHORS: Blount, Amy
AUTHORS: Berggren, Travis
AUTHORS: Bilezikjian, Louise
AUTHORS: Sawchenko, Paul
AUTHORS: Vale, Wylie
TITLE: Identification of a second
TITLE: corticotropin-releasing factor receptor gene and
TITLE: characterization of a cDNA expressed in heart
JOURNAL: Proc. Natl. Acad. Sci. U.S.A.
VOLUME: 92
PAGE: 2969-2973
DATE: March-1995
US-08-981-189B-11
```

```
Query Match 91.0%; Score 2026.5; DB 3; Length 431;
Best Local Similarity 87.9%; Pred. No. 3.2e-186;
Matches 376; Conservative 12; Mismatches 15; Indels 25; Gaps 2;
```

```
QY 3 AALLSLLEANCSLALAEELLDDGWEPPDPE-----GPYSYCNNT 43
DB 10 AQLLL-----CLFSLLPVLQVAOPGQAPQDQPLMTLLQYCHRTTIGNFSGPPTYCNNT 63
QY 44 LDQICTCPQSPAGALVBRPCPEYNGIKYNTTRAVRECELENGTWASRINYSHCEPILD 103
DB 64 LDQICTCPQSPAGALVBRPCPEYNGIKYNTTRAVRECELENGTWASRINYSHCEPILD 123
QY 104 DKORKYDHYRIALINYLGHCVSVVALVAAFLFLVLRISIRCLRNVIHMLITTFILRN 163
DB 124 DKORKYDHYRIALINYLGHCVSVVALVAAFLFLVLRISIRCLRNVIHMLITTFILRN 183
QY 164 ITWFLQLIDHEVHGNENWCRCTTINFYVVTNFMFMFEGCYLHAIWVTSTELRL 223
DB 184 IAMFLQLIDHEVHGNENWCRCTTINFYVVTNFMFMFEGCYLHAIWVTSTELRL 243
QY 224 KWLFLFGMCIPCPPIIVMAVGKLYENEOCMFGKEADVDYIYQSPVMLVLLINPFL 283
DB 244 KWLFLFGMCIPCPPIIVMAVGKLYENEOCMFGKEADVDYIYQSPVMLVLLINPFL 303
QY 284 FNIVILMTKLRASSTSETIOYRAVKATLVLLPLGITVYMLFVNPGEDDLSQIVFIYF 343
DB 304 FNIVILMTKLRASSTSETIOYRAVKATLVLLPLGITVYMLFVNPGEDDLSQIVFIYF 363
QY 344 NSFLOSFGFVSVCYCFNGEVSALRKRMHRODHHALRVPARAMSIPSPTRISFH 403
DB 364 NSFLOSFGFVSVCYCFNGEVSALRKRMHRODHHALRVPARAMSIPSPTRISFH 423
QY 404 SIKQTAAY 411
DB 424 SIKQTAAY 431
```

```
RESULT 14
US-08-482-746-10
Sequence 10, Application US/08482746B
Patent No. 6399315
GENERAL INFORMATION:
APPLICANT: Perrin, Marilyn H.
APPLICANT: Chen, Ruoping
APPLICANT: Lewis, Kathy A.
APPLICANT: Vale Jr., Wylie W.
APPLICANT: Donaldson, Cynthia J.
APPLICANT: Sawchenko, Paul
TITLE OF INVENTION: Cloning and Recombinant Production of
TITLE OF INVENTION: CRF Receptor(s)
FILE REFERENCE: P41-90002
```

```
CURRENT APPLICATION NUMBER: US/08/482,746B
CURRENT FILING DATE: 1995-06-07
EARLIER APPLICATION NUMBER: US 08/374,009
EARLIER FILING DATE: 1995-01-17
EARLIER APPLICATION NUMBER: US 08/353,537
EARLIER FILING DATE: 1994-12-09
EARLIER APPLICATION NUMBER: PCT/US94/05908
EARLIER FILING DATE: 1994-05-25
EARLIER APPLICATION NUMBER: US 08/110,286
EARLIER FILING DATE: 1993-08-23
EARLIER APPLICATION NUMBER: US 08/079,320
EARLIER FILING DATE: 1993-06-18
NUMBER OF SEQ ID NOS: 15
SOFTWARE: FastSeq for Windows Version 3.0
SEQ ID NO 10
LENGTH: 431
TYPE: PRT
ORGANISM: Mus musculus
US-08-482-746-10
```

```
Query Match 91.0%; Score 2026.5; DB 3; Length 431;
Best Local Similarity 87.9%; Pred. No. 3.2e-186;
Matches 376; Conservative 12; Mismatches 15; Indels 25; Gaps 2;
```

```
QY 3 AALLSLLEANCSLALAEELLDDGWEPPDPE-----GPYSYCNNT 43
DB 10 AQLLL-----CLFSLLPVLQVAOPGQAPQDQPLMTLLQYCHRTTIGNFSGPPTYCNNT 63
QY 44 LDQICTCPQSPAGALVBRPCPEYNGIKYNTTRAVRECELENGTWASRINYSHCEPILD 103
DB 64 LDQICTCPQSPAGALVBRPCPEYNGIKYNTTRAVRECELENGTWASRINYSHCEPILD 123
QY 104 DKORKYDHYRIALINYLGHCVSVVALVAAFLFLVLRISIRCLRNVIHMLITTFILRN 163
DB 124 DKORKYDHYRIALINYLGHCVSVVALVAAFLFLVLRISIRCLRNVIHMLITTFILRN 183
QY 164 ITWFLQLIDHEVHGNENWCRCTTINFYVVTNFMFMFEGCYLHAIWVTSTELRL 223
DB 184 IAMFLQLIDHEVHGNENWCRCTTINFYVVTNFMFMFEGCYLHAIWVTSTELRL 243
QY 224 KWLFLFGMCIPCPPIIVMAVGKLYENEOCMFGKEADVDYIYQSPVMLVLLINPFL 283
DB 244 KWLFLFGMCIPCPPIIVMAVGKLYENEOCMFGKEADVDYIYQSPVMLVLLINPFL 303
QY 284 FNIVILMTKLRASSTSETIOYRAVKATLVLLPLGITVYMLFVNPGEDDLSQIVFIYF 343
DB 304 FNIVILMTKLRASSTSETIOYRAVKATLVLLPLGITVYMLFVNPGEDDLSQIVFIYF 363
QY 344 NSFLOSFGFVSVCYCFNGEVSALRKRMHRODHHALRVPARAMSIPSPTRISFH 403
DB 364 NSFLOSFGFVSVCYCFNGEVSALRKRMHRODHHALRVPARAMSIPSPTRISFH 423
QY 404 SIKQTAAY 411
DB 424 SIKQTAAY 431
```

```
RESULT 15
US-09-580-734-10
Sequence 10, Application US/09580734
Patent No. 6482608
GENERAL INFORMATION:
APPLICANT: Perrin, Marilyn H.
APPLICANT: Chen, Ruoping
APPLICANT: Lewis, Kathy A.
APPLICANT: Vale Jr., Wylie W.
APPLICANT: Donaldson, Cynthia J.
APPLICANT: Sawchenko, Paul
TITLE OF INVENTION: Cloning and Recombinant Production of
TITLE OF INVENTION: CRF Receptor(s)
FILE REFERENCE: Saik1748
CURRENT APPLICATION NUMBER: US/09/580,734
CURRENT FILING DATE: 2000-05-26
```

```

; PRIOR APPLICATION NUMBER: 09/191,724
; PRIOR FILING DATE: 1998-11-12
; PRIOR APPLICATION NUMBER: US 08/374,009
; PRIOR FILING DATE: 1995-01-17
; PRIOR APPLICATION NUMBER: US 08/353,537
; PRIOR FILING DATE: 1994-12-09
; PRIOR APPLICATION NUMBER: PCT/US94/05908
; PRIOR FILING DATE: 1993-05-25
; PRIOR APPLICATION NUMBER: US 08/110,286
; PRIOR FILING DATE: 1993-08-23
; PRIOR APPLICATION NUMBER: US 08/079,320
; PRIOR FILING DATE: 1993-06-18
; NUMBER OF SEQ ID NOS: 15
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 10
; LENGTH: 431
; TYPE: PRT
; ORGANISM: Mus musculus
US-09-580-734-10

```

Query Match 91.0%; Score 2026.5; DB 4; Length 431;
 Best Local Similarity 87.9%; Pred. No. 3,2e-186;
 Matches 376; Conservative 12; Mismatches 15; Indels 25; Gaps 2;

```

QY 3 AALLSLLEANCSLALAEELLIDGGEPPDPE-----GPRSYCNTT 43
DB 10 AQLLL-----CLFSLPLVQLVQAPQAFQDQPLMTLLEQYCHRTTIGNFSGPYTCNTT 63
QY 44 LQOIGTCWPQASAPGALVERPCPEYENGICVNTTRNAVRECLENGWTASRINTSHCEPILD 103
DB 64 LQOIGTCWPQASAPGALVERPCPEYENGICVNTTRNAVRECLENGWTASRINTSHCEPILD 123
QY 104 DKQKKYDLHYRIALILINYLGHCVSVVALVAAFLPLVLSIRCLRNVIHMNLITTFILRN 163
DB 124 DKQKKYDLHYRIALILINYLGHCVSVVALVAAFLPLVLSIRCLRNVIHMNLITTFILRN 183
QY 164 ITWFLIQLIDHEVHEGNEVWCRCVTTIFNYFVVTFNFMMFVEGCVLHTAIVMTYSTEHLR 223
DB 184 IAMFLLQLIDHEVHEGNEVWCRCVTTIFNYFVVTFNFMMFVEGCVLHTAIVMTYSTEHLR 243
QY 224 KKLFLFIGICIPCIIVAAVAGKLYENRCWPGKEPGDLVDYIYOGPIILVILINFPVL 283
DB 244 KWLFLFIGICIPCIILIAVAGKLYENRCWPGKEAGDLVDYIYOGPVLVILINFPVL 303
QY 284 FNIIVRLMTKLRASTSETIOYRKAVKATLVLLPLIGITYMLFVNPGEDDLISQIVFIYF 343
DB 304 FNIIVRLMTKLRASTSETIOYRKAVKATLVLLPLIGITYMLFVNPGEDDLISQIVFIYF 363
QY 344 NSFLOSFOGFVSVFCFNGEVRSA LRKRHRMODHALLRVVVARAMS IPTSPTRISFH 403
DB 364 NSFLOSFOGFVSVFCFNGEVRSA LRKRHRMODHALLRVVVARAMS IPTSPTRISFH 423
QY 404 SIKQTAAY 411
DB 424 SIKQTAAY 431

```

Search completed: October 3, 2005, 07:58:57
 Job time : 29 secs

This Page Blank (usp10)